Clinical Lectures
ON THE
NERVOUS MIMICRY OF ORGANIC DISEASES,

Delivered at St. Bartholomew's Hospital,

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LECTURE VI.

NERVOUS MIMICRY (NEUROMIMESIS) OF TUMOURS.

GENTLEMEN,—I said in my first lecture that I should treat of nervous mimicry from only the surgical point of view. From even this limited view many things may be seen which I must omit, as mimic paraplegia, mimic tetanus, mimic aphonia, and others. Concerning these you may find excellent guidance to diagnosis in the best works on Hysteria. I will take now a set of cases that have been much less written of—the nervous mimicries of tumours. Of these there are three principal forms: the muscular or phantom tumours, the imitations of aneurisms, and those of cancers.

In what are called phantom tumours the imitation is due to the swelling of part of a muscle during contraction. This part, swelling and becoming harder than the rest, feels something like a smooth round or oval tumour or cyst, placed in or between the muscle. The rest of the muscle feels natural, whether relaxed or contracted. In the former state of the muscle the apparent tumour is most distinctly felt; in the latter state it may be nearly concealed, as if sinking in the muscle.

This condition of a muscle is altogether a strange one—not imitated, so far as I know, in any other state of muscle, unless it be in crimping, or in the flickering and passing contractions of dying muscles, or in the lumps which, it is said, may form in muscles that are struck soon after apparent death in any acute fever. If it may be compared with anything in living muscles, it may be with cramp which draws them into knots or lumps; but there is no pain in phantom tumours as there is in cramp. Whatever it may be, the condition seems due to erroneous nerve force in the muscle; for one form, the phantom tumours of the abdominal muscles, is most frequent in evidently hysterical women, and in other cases that I have seen there was certainly an abnormal state of nervous system, and in others it was very probable.

Three cases which I chance to have seen lately may illustrate the disease.

In one, a gentleman about sixty years old, came to me for a tumour, as he thought, in his right calf; and I found in the mid-substance of his gastrocnemius what seemed to be a roundish smooth lump, nearly two inches in diameter. While examining it I seemed sometimes to lose it altogether, as if it slipped away or receded into the depths of the calf: and then, after a time, I convinced myself that it had no real existence as a tumour; that it could be put out by friction, or by complete relaxation of the muscle, or in some postures of the limb. It seemed due to defective or disorderly nerve force in the muscle; for the patient had been slowly becoming very feeble in his lower limbs, and had the slow, short-stepping, shuffling gait, and weak, monotonous voice and unclear speech, which, I suppose, betoken senile degeneracy of nervous centres.

The second case was that of a clergyman, about thirty, who came for weakness of the lower limbs and frequent falling, which he was disposed to ascribe, in some measure, to a "lump" near his left knee-joint, and another, less prominent, near the right. His calves were very large and muscular; his thighs small and weak; and the lumps were swellings of the lower ends of the internal vasti, when, with the other wasted and weak muscles of the fronts of the thighs, they contracted. They did, indeed, look something like smooth oval cysts by the knees; but they subsided so quickly and completely when the action of the muscles ceased, that there was no difficulty in seeing what they were. And here, too, was nervous defect. The patient had very strong big calves and small thighs and loins, which were so weak that he often fell, and could only hold himself erect with great labour and throwing back of his shoulders. This condition had existed in less degree from early life, and, I believe, indicated in this, as in other similar cases of big calves and small thighs and loins, some degenerative defect of the lower part of the spinal cord.

The third case was that of a lady about sixty, who had had a tumour on or over her left parotid. This had been removed about eight years before I saw her, and in the operation the facial nerve was injured, so that the left facial muscles were partially paralysed and subject to occasional twitchings during emotion. In the last year there had been a renewed superficial growth over the parotid, and with this an increase in the facial twitches. But what much more alarmed the patient was the appearance of a tumour, as she thought, below the left clavicle. This was the clavicular portion of the pectoralis major, partially contracted and hard, and perhaps made irritable, or more attractive to the alarmed attention, by the frequent twitchings of the platysma. All appearance of tumour was spoiled by raising the arm above the head; when the muscle was completely relaxed it all felt as soft and natural as its fellow.

This last patient was over-sensitive and excitable, and probably augmented the disorderly action of her muscle by her too careful attention to it. The direction of the mind alone may, indeed, suffice to make, in some persons, a distant imitation of a tumour in a muscle. I once saw a gentleman who was possessed with the fear that he would die of psoas abscess because his brother did; and, for a day or more, he was constantly pressing his abdomen towards the psoas by the spine, till a part of his oblique abdominal muscle had become so irritable that it hardened and swelled at every attempt at pressure, and felt something like a tumour. All this ceased when it was completely relaxed by posture. But in ordinary cases the mind seems to have nothing to do with the phantom. The first two cases were in very ordinary gentlemen, and mental influence could not fairly be assigned as any reason for their mimicry of tumours.

There should be no great difficulty of diagnosis in the ordinary cases of this kind. A real tumour that lies deep in or beneath thick muscle may be pressed down beyond clear touch when the muscle contracts and hardens; and it may be difficult to feel the boundaries of a venous tumour or nævus in a deep or thick muscle. But these things will not mislead you if you will study the case long enough to be clear as to the inconstancy of appearance. If in one minute an apparent tumour is under the fingers and in the next minute is gone; if it shifts from one part of a muscle to another, as one set of fibres after another contracts; if it wholly disappears when the muscle is long relaxed,—this is a phantom, a mere mimicry of a tumour.

There is rather more difficulty in some of the cases of phantom tumours which occur in the abdominal muscles of hysterical women. These are sometimes large, hard, and more nearly fixed in place, size, and form, than those in the limbs, and they may be deceptively complicated with disorderly states of the intestines, or the aorta, or other abdominal or pelvic organs. But in any case, however difficult of diagnosis, ether or chloroform will bring all the help you need. With complete insensibility and muscular relaxation all signs of tumour disappear—the phantom vanishes.

Let me tell you the most striking case of this kind that I have seen. It was in a healthy-looking woman, about thirty years of age, in Sitwell ward. I admitted her for a tumour in the upper part of the abdomen, behind, as it seemed, the first division of the left rectus abdominis muscle, but larger than that seemed. It was roundish, firm, nearly hard, constant in its characters and place, often painful, and distinctly pulsating, like an aneurism. A light bruit was audible in it. Of its history I only remember well that there was nothing to help in diagnosis. In full medical and surgical consultation with my colleagues, the questions were whether there was a tumour with pulsation communicated from the aorta, or an aneurism. If a tumour, where, or in what? If an aneurism, of what artery? The opinions were many and various, partly, perhaps, because

the examination was painful, and, therefore, possibly, incomplete. So one day I gave the patient chloroform, and the tumour, the aneurism, and the doubt dispersed; they were all phantoms.

This case, in which an abnormal nervous condition of a muscle and of the abdominal aorta appeared to be combined, may lead us to the next set of mimic tumours—the imitations of aneurisms by what I suppose to be abnormal nervous conditions of arteries. The evidences of this condition are, indeed, not complete; but, at least, the mimicry of aneurism is more frequent in persons of nervous constitutions than in any other. It is sometimes associated with well-marked hysteria, and the likeness of aneurism often varies, according to the state of the patient's nervous system.

This mimicry is most frequent in the abdominal aorta, in which it has often been described as a nervous abdominal pulsation; but, so far as I know, it is not described as occurring in the subclavian, innominate, or carotid arteries, though in those it is not very rare, and sometimes is not easy of diagnosis. The chief characteristic of the mimicry is that the affected artery feels much larger than it should be, and pulsates largely at least in one direction, dilating obtrusively, and often so much more visibly than in an ordinary person that it is hard not to believe that it is largely dilated. And yet there certainly is no considerable dilatation; it is rather as if the arterial walls were thin and had too little muscular resistance, as we might suppose them to be in a condition of partial paralysis of their muscular tissue. In the most marked case of imitation of abdominal aneurism that I have seen, examination after death found no disease. A lady of very nervous constitution had suffered severe sea-sickness in a passage to Ireland. The sickness scarcely ceased during her stay there, and was aggravated on her return voyage, after which she continued vomiting nearly all her food, till, at the end of some weeks, she died exhausted. During these weeks there was so large and strong a pulsation in her abdominal aorta that some were convinced that she had abdominal aneurism. As she lay on her back, one could see the artery pulsating behind the abdominal wall. It raised the hand laid on it, thrusting up the fingers with a firm throb and a thrill, and a low but distinct blowing was audible when the stethoscope was lightly pressed on the artery. Yet there was no aneurism. After death the artery was found absolutely healthy in both size and structure.

I say again, I do not know what is exactly the state of the arteries in these cases. There are few opportunities of examining them after death; and I have heard of none that told more than the one I just now mentioned to you. But, clinically, these cases are well marked. The artery feels large, wide, and full; but soft and compressible, or even, if one may so call it, puffy, without any of the hardness or stiffness constantly found in aneurisms. The pulsation is full, but rather soft—like that of an artery in the reaction after large loss of blood; and, which is chiefly characteristic of the absence of dilatation or aneurism, the extra full pulsation is in only one direction. There is no unusual lateral dilatation; the too much throb is only forwards.

The likeness to aneurism in these cases is sometimes greater than could well be expected; for many things besides the excess of pulsation may contribute to it. In the abdominal aorta an unusual appearance of prominence may be given by an unusual anterior curve of the lumbar vertebræ; and by thinness, with concavity of the abdominal walls, and emptiness of the stomach. Hardness or toughness of the pancreas, or of lymph-glands about the aorta, may yet further increase the likeness to abdominal aneurism.

In like manner, the imitation of subclavian aneurism is made more marked when a nervously pulsating subclavian artery has glands beneath or about it; and still more when it lies on a cervical rib, and is somewhat raised and, I suppose, widened. And the imitation of upper carotid aneurism is added to by the very bulbous form of the first portion of the internal carotid and its occasionally tortuous course. That of the lower carotid aneurism may be augmented by enlargement of an overlying lobe of the thyroid gland.

With all these helps to difficulty you may sometimes be troubled in the diagnosis of a mere nervously pulsating artery. In nearly all the cases I have had to see aneurism was suspected; but a few rules will ensure against error. The nervous artery has no lateral expansion; it does not open the finger and thumb when they laterally compress it lightly; you can trace the straight lines of its sides; in the abdominal aorta the pulsation is lost, or nearly lost, when the patient sits leaning forward; in the other arteries, by relaxing the parts over them. Always the artery has at least its natural softness and compressibility; commonly it has more. There are no paroxysms of pain; and if the case has been watched for months, or even years, there is little, or more often no, increase of size. On the other hand, the extent of artery which may feel dilated may much increase, so that we may see and feel, for instance, an abnormal throbbing in the innominate, carotids, and subclavians of the same patient—a state unheard of in aneurisms.

Before leaving this subject, I just mention to you the cases in which you will find, in certain patients, anæmia, enlarged thyroid gland, protruding eyeballs, and pulsating carotid arteries. The study of these cases might clear the obscure pathology of the mimic aneurisms; but with this I am not occupied, so I leave them, and go on to the last set I have to speak of.

It may seem absurd to say that cancerous tumours can ever be imitated by any nervous disorder; and, indeed, they cannot; yet you will find few cases requiring a more positive diagnosis than those in which you will have to assert, as beyond all doubt, that a patient has not cancer, but neuralgia.

The cases in which the diagnosis is most often necessary are those of suspected cancers of the breast and of the tongue. Of course any part may be similarly suspected; but, taking all other parts together, they would not supply, at least in surgical practice, so large a number of cases of suspicion as these two.

For the breast, the usual case is that a patient complains of all the pains commonly described as characteristic of cancer. She has dull, aching pain, it may be, of the whole or some part of the breast, and often the pain extends down the arm, more often goes right through to the scapula; and sometimes it is a darting, lancinating pain, shooting this way or that, or burning. I think that you will not find any pain of cancer of the breast which will not be described by patients with this neuralgic mimicry of the disease.

But, however severe the pain, and however like what is supposed to be characteristic, your diagnosis may be clear. That is not cancer which you cannot feel. Cancer is a growth, not any kind of pain, and indeed in its early stages seldom attended with pain; so that when pain is strongly marked, and it is very difficult, or impossible, to feel any tumour or "lump" in the breast, you may be certain that there is no cancer.

In most of these cases the pain has an entirely mental origin. The patients have been seeing or hearing of cancer, and their minds have been filled with thoughts of the pain and misery of the disease, till the idea has generated the sensations from which it was derived, and the subjective sensations are referred from the centre to the periphery.

I have said "the mind has been filled"; but this is not necessary. I have known these pains mimicking the pains of cancer in persons who had indeed often thought of cancers, but never intently, nor with any sustained fear. Just as one may, in dreaming, have vivid impressions of objects he has rarely, perhaps only once, seen, and scarcely ever thought of, so may these imitative pains be felt keenly and often in those who have seldom considered or feared them.

In these wholly mental cases the confident assertion of your judgment will commonly suffice for cure. Sometimes, indeed, patients need repetition of the assertion, especially those who are hysterical, &c. Their trust seems to die out after a few weeks or months, and some of them rather prefer the disease.

There are cases, however, in which the pain is not wholly mental. Neuralgia of the breast sometimes follows a blow. That which in ordinary persons would be followed by aching for some inconsiderable time is apt to be followed in the nervous by long-abiding pain, which the mind will invest with all the characters of what it supposes to be the pain of cancer. And, again, neuralgia of the breast is not rare in gouty or otherwise "painful" persons, and most of these are ready to fear that their pain is due to cancer, and to

endow their pain with the characters which they suppose to belong to it. As fear can give to any harmless form the shape and substance of that which it most dreads, and can see spectral terrors in a scarecrow, so can it give to ordinary neuralgic pains any of the characters of the pains of cancer. It is especially prone to do this when the neuralgia is felt in a part notoriously liable to cancer. In this part fear will make pain cancerous, even while neuralgic pains, quite as severe, are common in other parts of the body, and in them are regarded without dread.

The diagnosis is more difficult when, with the pain described as like that of cancer, there is, or appears to be, some change of structure of the breast; for of course a very nervous patient may endow any mammary disease with any form of pain.

In these cases—which, however, are far more rare than those of neuralgia without change of structure—you must make your diagnosis on the characters of the tumour itself, if there be one. But be cautious about one or two fallacies. Many neuralgic breasts are a little larger than their painless fellows. But mere largeness is not tumour, much less cancer. And many mammary glands, whether neuralgic or not, are rather firmer or tougher in one part than in others; and when the tough part is grasped, and, as it were, doubled between the thumb and fingers, it may feel something like a hard tumour. Let me advise you not to use this mode of examining a mammary gland. I have known it often fallacious, never useful. If you cannot feel a tumour by feeling or pressing over and round it, you may believe there is not one; you may be certain there is not a hard cancer.

And if you can feel a tumour, do not believe it to be cancerous merely because it is painful. Judge by what you can feel, not by what the patient feels; remembering always that in the early stages of cancer of the breast, in which alone there is any difficulty of discerning it by its tangible characters, it is rarely very painful. All the popular ideas of the pains of cancer are derived from the cases of advanced disease, or of cancers growing rapidly or inflamed or ulcerating. In early cases, and in nearly all in which the diagnosis is obscure, the greater the pain the less is the probability of cancer. And, let me add, neuralgia, even of the severest kind and longest duration, does not tend to cancer of the breast. I must have seen more than a hundred cases of neuralgia, and I have seen only one in which it was followed by cancer, and I have no belief that in this one the sequence was a consequence.

Most of what I have said of the breast might be applied, with change of name, to the mimicry of cancer of the tongue. Nervous people hear of the cancer, and then, with less or more of thought about it, have pain and aching in their own tongues, usually at the side and in that frequent seat of cancer, at the junction of the middle and posterior thirds. Others have neuralgia of the tongue; a dull, heavy, aching on one side of it—a condition which is far from rare in the habitually neuralgic, especially, I think, in the gouty, and these give to their neuralgic pains what they believe to be cancerous characters. And others, with dyspepsia, have sore tips or edges of their tongues, which they, too, magnify.

It is strange to observe the tenacity with which some of these patients cling to the most dismal view of their cases. Though nothing wrong can be seen or felt, and though months, or even (as I have known) years, may pass without any disease appearing, yet will they believe themselves on the brink of misery with cancer of the tongue. But your diagnosis may be as fixed as their fears, and had better be more positive. That is not cancer which you can neither see nor feel. And do not be deceived by an unusually large cluster of papillæ of the circumvallate group, or by any little thickening due to irritation of a tooth, or by a fissure or psoriasis. A patient's fear will give any of these the sensations of cancer; but, as I said of the breast, so here, your diagnosis must be founded, not on the patient's sensations, but on your own.

WEST KENT MEDICO-CHIRURGICAL SOCIETY.—On Friday, the 5th inst., the third meeting of the session was held under the presidency of Dr. F. Moon, when Dr. J. C. Thorowgood read an excellent paper "On the Nature and Treatment of Asthma," and Mr. John Prior Purvis showed, under the microscope, the Head of a Tænia Solium.

ON EPIDEMICS IN 1872-73.

Abstract of Introductory Address at the Epidemiological Society, Nov. 12th, 1873,

BY INSPECTOR-GENERAL SMART, M.D., C.B.,
PRESIDENT OF THE SOCIETY.

OF the different epidemic diseases prevalent during the last sessional year, Cholera has been the chief; and to comprehend it fully, it is necessary to go back to the outburst at the great festival at Mecca in 1865, from which the disease spread into Europe through Egypt, and backward into Western Persia by the Syrian route, and by vessels returning with pilgrims up the Persian Gulf. Since then the disease seems not to have become extinct in either region. In Europe there was a very general state of rest in 1868, but it seems never to have disappeared from South-Western Russia. In August, 1864, it broke out in Kiest during the festival, and thence it diffused itself widely in Southern Russia through 1869-70, its tendency being eastward along the coast of the Black Sea to Poti; after which it prevailed at Erzeroum, Tiflis, and at Baku on the west coast of the Caspian Sea, in 1871 approaching near to the Persian focus. In the same year another eastward course lay across the Ural into Siberia, and before winter set in it had reached the Obi. In the spring it spread southward into Tartary, between the Caspian and the Lake of Aral, reaching Samarcand in June, and further onward to the highlands that bound Independent Tartary, where it came into relation with a fresh invasion from Bengal, which reached Bokhara, carrying off 1000 a day in August.

In Europe, the disease spread from Kiest into the central provinces of Russia in the autumn of 1869; and in January, 1870, it was in Moscow, in February in Novgorod, and at St. Petersburg in August, remaining in Russia that year. In 1871 it pervaded the empire from the Black Sea to Archangel on the White Sea, and from the Gulf of Bothnia to the Ural Mountains; and appeared at Konigsberg, in Eastern Prussia, late in July, spreading eastward to Memel and westward to Stettin on the south shore of the Baltic; and crossed the Gulf of Bothnia to Hernosand in Sweden early in September, when it had reached Berlin from Stettin, and to Hamburg; from which place cases were sent to Hartlepool in England in September; and in November emigrants from Stettin had conveyed it across the Atlantic to Nova Scotia. Southward it spread to the mouths of the Danube and Varna and to Constantinople, and thence to Salonica, Cerigo, and St. Jean d'Acre, by steamers from Constantinople; having been epidemic at Broussa on the Asian shore of the Sea of Marmora a month earlier than at Constantinople.

In the winter of 1871 it remained in South-West Russia, and at Revel, on the Gulf of Finland; reappeared in the spring in St. Petersburg and Moscow; and broke out again fiercely at Kiew amongst the pilgrims in mid-June. Early in August it was in Berlin, and in October it reached Sweden, at Geflé, south of Hernosand, where it was the year before. From Kiew it crossed the Podolian frontier into Galicia early in July, and diffused into Poland, Silesia, Moravia, and Bohemia; to Berlin in August; to Prague and to Dresden in November; while southward it raged in the plains of the Dnieper and Dniester, reappearing at Odessa, and later in Constantinople, in both of which it became extinct on the approach of winter. It crossed also the highland of Bessarabia, and reached to the Danube in Hungary, remaining until February in Buda-Pesth; and through the winter in parts of Hungary, also in Prague, and very widely in Galicia. The most westward city reached in 1872 was Dresden, it having advanced 10° of longitude in that year. In the early months of 1873 it was quieted generally; but gave indications at Vienna in January, and at Pultusk, near Warsaw, in February.

In May it resumed invasive force on the Danube, the Vistula, and the Elbe, and appeared for the first time in Venice and Treviso, reported from Hungary, from which it spread to Parma and Genoa, and to Naples, Rome escaping.

On the Danube it touched all the towns in May and June

from Widdin to Tultchá, and Orsova, Krajova, and Jassy on its northern plains, and Shumla, between Rustchuk and Constantinople, which escaped; while it passed inland to Salonica on the Ægean. On the Upper Danube it had never been long absent at Buda-Pesth, and at Vienna it was beyond concealment at the end of June; it was in Passau in July, and in Munich on the Iser in August. From the Danube it passed to the towns on the Maine, Ratisbon, Nuremberg, Bamberg, and Würzberg, reaching the last late in August, the valley of the Rhine escaping.

On the Vistula it broke out in Warsaw and Thorn in May; and was at Dantzic on the 24th of June; eastward, at Königsberg, in July; St. Petersburg in June, and Cronstadt in July; and westward to Stettin and other parts of Germany, crossing to Helsingborg, in Sweden, on the 23rd of July, and appearing at Bergen, on the West Coast of Norway, in October.

On the Elbe it had wintered in Prague, and was in Dresden in mid-May, and at Hamburg in June. From this it was taken to Hull, and through to Liverpool, by German emigrants, in the first week of September; and to Wapping, by Danes and Swedes, on the 18th of July. An infected vessel from Cronstadt arrived in the Thames on the 6th of September. From Hamburg it was imported into Havre on the 19th of July, from which it extended to Rouen and to Paris on the 4th of September, and to Caen. From Havre it reached Southampton on the 10th of September, and again later in the month, when it was carried through the same day to Liverpool by French seamen, as it had been from Hamburg through Hull by emigrants; and in September two infected vessels from Havre were docked in Liverpool. But, happily, diffusion has not occurred in England from these several sources, there having been only one sporadic case, at Netley, on the 13th of September.

As cholera began to extend westward from Russia in 1871, so in that year it spread westward from the head of the Persian Gulf across North Arabia to the Holy Places, where all the caravans of pilgrims became infected; and those from Africa conveyed it across the Red Sea into Nubia and Darfur, Egypt escaping the infection under strict quarantine observances.

The Indian epidemic of the spring of 1872 arose after a repose in 1870–71. It marched from Bengal through the N.W. provinces into Cashmere, where it fell faint; but further west, in Bokhara, the mortality was great, and this was bordering on the extension to Samarcand of the backward movement from Russia. It spread eastward, likewise, in 1872, into Burmah, and in 1873 has been at Singapore, and in Bungkok in Siam, and is now severe at Batavia in Java.

These eastward extensions have usually preceded by a year or two those in a westward direction. They have reached Japan, and may probably extend to California among Asiatic emigrants.

The disease was suspected, at least, in Cuba towards the end of 1872; and in April, 1873, it appeared in New Orleans, from which it ran rapidly to Memphis on the Mississippi and up the Missouri to St. Louis, and up the Ohio to Louisville and Cincinnati, keeping west of the Alleghanies and south of the lakes. Steamers conveyed it along the course of the river, and from Memphis it was carried by rail to Nashville in Tennessee.

Everywhere the contrast in results between sanitary and insanitary towns was great. Cincinnati, Memphis, and Nashville suffered greatly, and Louisville scarcely at all.

In the Levant, and at Malta and Gibraltar, quarantine has been relied on, with good results in the last two places, since the Congress of 1866; but in England we can use only general hygienic measures, together with the isolation of the first units of disease.

At the present time the capitals of Russia, Austria, Prussia, and France are infected; also Cronstadt, Riga, Revel, Lubeck, Helsingborg, Bergen, Hamburg, Rotterdam, Dort, Schiedam, Antwerp, and Havre, all of them communicating with England. The principles of prevention by general sanitation and by isolation of imported units of disease are still being put severely to the test; and if they prevail, no outbreak among us following in the ensuing spring as on former similar occasions, it will be a triumph for us and them. We have strong grounds for hope in the reports of the Registrar-General, which show a very remarkable freedom from all zymotic diseases up to the present time, and that diarrhœal complaints, which have kept below par, having attained their maximum in the first week of August, have since then very steadily declined, notwithstanding so many undoubted importations of cholera.

In 1873 Yellow Fever has been very active in two regions, from Monte Video to Cayenne, and in the heart of the Southern United States, where its succession to a cholera epidemic betrays a strongly marked and widely diffused morbific agency. Its outbreak at Shreveport, in Louisiana, and extension across to Savannah on the Atlantic shore, argue for its indigenous origin and growth. Like enteric fever with us, it depends on its own local causations, and without the action of heat and moisture on filth of animal and vegetable decay it cannot exist or become epidemic. At Memphis the advent of the first frosty nights was hailed as the harbinger of its decline and certain extinction. In Jamaica, it did not present any cases until the middle of October, when it showed itself among negroes who had not been exposed to any infection; but there had been a general bad sanitary state marked by very fatal small-pox, remittent and intermittent fevers, dysentery, and diarrhœa, culminating in isolated cases of yellow fever, the sanitary resources of the island being severely tried.

Of Enteric Fever, the produce of sewer emanations, our naval history has afforded an instructive instance: two distinct squadrons that touched at Vigo in February and took in water there, when the health of the population was "particularly good"; but it was ascertained that the disease was present there in the summer of 1871. The town itself is full of bad sanitary conditions; the streets pervaded by foul odours, arising from broken sewers, which seemed harmless to the inhabitants, and to have produced no sickness in one of these squadrons that anchored there late in October last year, but took this fever on returning to it on the 1st of March; the other squadron having been there early in February, and having shown disease fourteen days after departure. The crews had leave, and many slept ashore. Their infection was not, however, attributed to that, but by all the surgeons to the supply of water brought off in the town tanks, a suspected source of which was a rivulet running through manured vineyards, frequented by washerwomen. Of seven ships four suffered, none having filters, and of three that escaped two had Crease's filters in use by the crews.

The Ashantee war began to arouse the public mind when fatal disease showed itself so quickly among the first troops sent from England; but this disease was truly endemic, and not epidemic, of a nature familiar to navy and army surgeons serving in hot, moist climates. The fever is of the pernicious malarial type that ends fatally by coma, or passes into intermittent type in convalescence. The dysentery is ulcerative or sloughing; attacking the solitary glands of the large intestine and causing their ulceration, or stuffing the submucous tissue with morbid deposit until the superjacent mucous coat is destroyed. The cause seems to be one for both forms of disease, which were found to run into each other and to coexist; the dysenteric or complicated form being by far more fatal. The spleen was in all cases enlarged, of deepest claret colour, and friable; and bacteria were crowded in the blood of the left ventricle in one case; while in another, both being dysenteric, a large liver abscess was filled with these minutest of organisms.

Another febrile epidemic disease—Dengue—has continued to spread eastward in Asia. It commenced at Zanzibar in 1870, and was called there by the negroes Ka-Dinga before it was discriminated by the Europeans. It reached Calcutta in 1872, and spread through Bengal in the same year, and it has been lately in the north of China. It is a pure epidemic like influenza, and infectious, unknown hitherto in Europe, but well known in America and among the negro islands; it was epidemic in Calcutta in 1824, from which time till 1870 it was unseen east of the Cape of Good Hope.

The small-pox epidemic diffusion that commenced in England in 1870 has shown during the successive quarters of 1873 a gradual decline, and a great decrease relatively to the corresponding quarters of the previous three years, so that we may believe that it will soon disappear. In the spring of the year it visited the Azores with severity; and in the summer and autumn it has prevailed in a most fatal form among the negroes of Jamaica.

Of other eruptive diseases there has been no marked outburst hitherto made known.

TUMOURS, ATTACHED TO DURA MATER, PRESSING ON THE SUPERFICIAL BRAIN-SUBSTANCE; PARALYSIS.

BY W. G. BALFOUR, L.R.C.P. & S.E., &c.,
MEDICAL SUPERINTENDENT OF THE HAMPSTEAD ASYLUM.

(*Concluded from p. 661.*)

CASE 2.—A. M——, a female, aged fifty-five, admitted into the Hampstead Asylum Sept. 9th, 1873. Has been twice married; previous to her second marriage, twenty-nine years ago, suffered from syphilis. Her husband states that for the first fifteen years of their married life everything went well with them, and they lived happily. After this her whole nature and habits changed: she neglected her home; ceased to assist him at his trade (watchmaking, at which he says she could earn a guinea a day); took to drinking and going with other men, pledging and selling furniture, clothing, and everything she could lay her hands on. During her menstrual periods she suffered from severe frontal headache. Three years before she was sent to the asylum her husband took a cottage in the neighbourhood of London, and placed her in it, thinking that removal from evil associations would effect a change in her ways. In this he was disappointed; she became more addicted to drink and bad company, depraved and reckless in her conduct, stripping herself naked and sitting at the open window in a state of nudity, frequently being so drunk as to be unable to recognise her own house. Her husband then separated himself from her, and gave her a weekly allowance in money sufficient to keep her. Ten weeks previous to her admission the woman in whose house she lodged informed her husband that his wife was dying. On visiting her, he found her partially paralysed, having to a certain extent lost the power of her hands, walking with difficulty, her speech hesitating and her articulation imperfect, the angle of her mouth on the right side drawn down, the right eye open and vacant-looking, and her manner childish. She had lost all knowledge of the value of money; and stated that some one had died and left her a large fortune. Ate her food ravenously, seizing it with her hands and thrusting it by the handful into her mouth. She was taken to the workhouse, where, at the end of a fortnight, she lost her sight, and was then brought to the Hampstead Asylum. On admission, the power of the right side seemed less than the left, and she was blind and deaf—to a certain extent. She could distinguish light from darkness, apparently, with the left eye, always bringing it to bear in the direction that she heard any sound. The left pupil was dilated, and she seemed to have more power of the left than the right eyelid. Her bodily condition was good. Mentally, when spoken to loudly, she would answer correctly; often requested the nurses to inform anyone that came after her that she "never took the money"—having, apparently, the delusion that she had stolen something, and that detectives were on her track. She constantly requested the nurses to go out and purchase drink for her. Her speech was slow and hesitating; was able to walk slowly without assistance, and preferred to find her way about herself, screaming if anyone touched her, and saying that they meant to "lead her against something."

Continued much as on admission till a week before her death, when she began to change, was dirty in her habits, screamed when moved, said she suffered greatly from pain in her throat, right ear, and legs. Halted between each word in her sentences, and had great difficulty with labials: thus, told her husband that if he "would—take—her—out—she—would—be—*quite*—well—in—a—*fortnight*." Had delusions of mistaken identity, and had no idea of where she was. At 9 o'clock in the evening of the day before her death she was reported as being in a fit. When visited was found to be generally convulsed, but more severely on the left side than on the right side. In one hour had four fits, and was more or less convulsed all night. Had a very severe fit next morning, from which she never rallied, dying comatose at 8.47 A.M.

Autopsy, twenty hours after death.—Temperature 50°; body well nourished; rigor mortis general and strong.—Head: Measurements — occipito-frontal, 7½ in.; temporal, 6 in.; frontal, 4 in. Calvaria normal; slight opacity of arachnoid. The arachnoid sac contained about half an ounce of sero-sanguineous fluid, and in the meshes of the pia mater, over the left parietal lobe, there was about half a tablespoonful of fluid blood. On removing the brain from its cavity the left angular gyrus was observed to be destroyed, its structure was disintegrated and granular-like, and it presented a cavity the size of a marble, in which rested an irregular gummatous-looking mass, arising from the dura mater. A cavity, the size of a pea, was observed in the white matter of the right hemisphere, about its middle superior, and to the outside of the ventricle, and the white substance of the frontal lobe of the right hemisphere had a curdy appearance, adhering to the handle of the knife when passed along it. The lateral ventricles contained two drachms and a half of dirty-brown serum. The right corpus striatum on section was found disintegrated and granular-like. The left optic nerve, previous to its junction with the right to form the commissure, appeared converted into a soft, dirty-yellow, gelatinous substance, with no trace of nerve structure. The floor of the fourth ventricle presented a yellow gelatinous appearance, and its left half was softer than the right. Arteries at base atheromatous.—Thorax: Cartilages of ribs ossified. Right lung universally and firmly adherent to costal pleura, and presenting a cavity the size of a walnut at the posterior part of the lower lobe. Lung-substance on section exuded a prune-juice-like fluid. Left lung apparently normal. Commencement of aorta atheromatous; aortic valves presenting ossific deposits, about the size of barley-seeds, in their substance. Mitral valve thickened. Weight of encephalon, 43 oz.

CASE 3.—J. C——, a male, aged forty-five, admitted the 2nd May, 1873. Has been married sixteen years. His wife states that for the first twelve years of their married life he was a kind and affectionate husband, regular in his habits, and very industrious; at the end of this time he was knocked down and robbed one night, and kicked on the head in the neighbourhood of the right frontal region. Six months after he received the kick on the head he began to suffer from intense frontal headache, generally during the night. He would sit up in the bed, clutch his head in his hands, and shriek from the suffering he endured. Three years and a half ago (six months after he was kicked) he had an epileptic fit during the night, was convulsed, and foamed at the mouth. Never had any fit previous to this time, but the fits recurred about once a week afterwards. Three or four weeks after the first epileptic seizure, he went with his wife to Kew Gardens, where he began to steal fruit, and would have been apprehended had his wife not interceded for him. In the course of the same week he stole some meat from a butcher's shop, and a marked change in his conduct was noticed. He became abusive to his wife, speaking to her in obscene and filthy language, cursing, striking, and attempting to kill her. He also made frequent attempts to set the house on fire, and on several occasions his wife had to take refuge in the streets to escape from his violence. He was sent to the workhouse, and from thence to an infirmary, where, after a residence of several months, appearing much relieved, he was taken out by his wife. After a short stay at home he again became unmanagable, was sent back to the workhouse, where he remained till he was brought to the asylum.

On admission his bodily condition was bad; he could scarcely walk, and had a troublesome cough. During the first five weeks of his residence he gained strength, and began to do a little work in the wards. He was then seized with epileptiform fits, having several at a time, with complete intermissions of a week. His mental state was weak; he seemed to have little heart to do anything, or to move about except when obliged, and took no interest in the affairs of the ward. Latterly his fits were more frequent and more severe, often being continuous for four or five hours at a time. He was observed whilst having the fits to be more convulsed on the left than the right side. At times, when free from fits, he was apparently quite sane, at other times was rambling and incoherent in his conversation, often swearing, stating that he was being drawn along the streets in a carriage, that the asylum was to be burned down, refusing to recognise his wife, swearing at and otherwise abusing her when she visited him one day, and on the next speaking kindly to, and being pleased to see her.

Shortly before his death he began to refuse his food, and required feeding, but was always willing to take gin or brandy when it was given to him. Died on Oct. 15th, 1873, of exhaustion from epilepsy and phthisis pulmonalis.

Autopsy, eighty-three hours after death.—Temperature 54°F. Rigor mortis absent. — Head: Measurement of occipito-frontal, seven inches; temporal, three inches and a half; frontal, four inches. Calvaria normal. The dura mater covering the inferior, middle, and superior frontal gyri on the right side was found thickened and adherent to the brain-substance, presenting on section a fleshy appearance. The adhesions to the surface of the convolutions were dependent on numerous masses of grey miliary tubercular matter, about the size of barley-seeds, springing from the dura mater. The membrane, on its detachment, brought away pieces of brain-tissue, and the brain-substance at this part was disintegrated and softened. The ventricles contained three drachms of clear fluid, and their lining membrane was granular. The brain-substance generally had a pasty appearance.— Thorax: The exocardium presented a thickened, milky-white patch, three-quarters of an inch long by half an inch broad, oval in shape, about the middle of the left ventricle. The right pleural cavity presented numerous shreds of dirty, yellow-looking lymph. Both lungs were completely infiltrated with grey miliary tubercular deposit, and both contained cavities, one of them being as large as a small orange.— Abdomen: The capsule of the spleen presented a milky-white patch, similar to that described as existing on the exocardium, only larger and thicker. The kidneys were contracted, and presented a waxy appearance. Weight of the encephalon, 44½ oz.

The principal symptoms observed during life in the foregoing cases, together with the chief brain lesions found on post-mortem examination, are given in the following table:—

Symptoms.

Case 1.	Case 2.	Case 3.
Pain in face constant, but irregular in severity.	Pain in frontal region intense, but irregular in its occurrence.	Pain in frontal region intense in severity, but irregular in its occurrence.
A complete change in habits and disposition, from virtue to vice.	A complete change in habits and disposition, from virtue to vice.	A complete change in habits and disposition: from being honest and kind to wife, took to stealing, &c.
Delusions, aphasia, and paralysis, with apoplectiform seizures.	Delusions, paralysis, loss of sight and hearing, epileptiform seizures.	Delusions and epileptic fits.

Post-mortem Appearances.

Tumours, fibrous and osseous, arising from dura mater pressing on superficial brain-substance.	Tumour, gummatous, arising from dura mater pressing on and destroying brain-substance, &c.	Tubercle, arising from dura mater pressing on and destroying superficial brain-substance.

An examination of these cases shows,—first, that the deposits originated from the membranes; and second, that there was a great change in the character and conduct of the individuals, coincident with the first appearance of the disease in the brain-membranes.

1st. Adventitious deposits found in the brain are regarded by some pathologists as invariably arising from the membranes, whilst by others they are considered often to originate directly from the nerve-tissue. If the recorded cases of tumours found in the brain, having no connexion with the meninges, are carefully examined, it will be seen that, although no direct contact with the membranes was observed, still they were always found in the neighbourhood of a membranous structure. It is quite possible that a tumour arising, say, from the lining membrane of one or other of the ventricles, from the sheath of the optic nerves, or from the covering of the pituitary body, may produce an amount of softening and disintegration in the surrounding nerve-tissue sufficient to make it impossible to exactly determine its place of origin. In the three cases recorded the tumours originated directly from the dura mater, and they go to support the opinion of those who hold that tumours in the brain must in all cases take their rise from one or other of the membranes that form the coverings of the brain-tissue proper.

2nd. Changes from a moral to an immoral mode of life, in persons at an age when it is generally considered that character and disposition have been fully formed, are not uncommon. These changes take the shape of dissipation, lying, stealing, and excesses in all their worst shapes, ending in paralysis, confinement in asylums, a merely vegetable existence, and early death. Individuals so afflicted are too often regarded as their own destroyers, and are pointed out by psychologists of a certain class as the victims of their own excesses. It is difficult to believe that a man or woman at the age of forty years, in comfortable circumstances, will, without any external reason, such as loss of means, friends, or position, forsake their homes and relations to plunge recklessly into those vices which degrade men, and with which for half a lifetime they had no sympathy.

Abuse of alcohol, in one or other of its forms, is known to produce a specific type of insanity—viz., delirium tremens, —as the puerperal state produces puerperal insanity. That it will induce brain disease such as that exemplified in the cases narrated has yet to be proven. It is certainly more probable that in such cases the brain-changes exist first, and that the transgressions of the laws of morality so frequently met with are their sequelæ, and must be placed in the same category with loss of memory, dementia, and paralysis, from which there is no escape by any effort of a person so afflicted.

BRIEF RECORDS OF

INTERESTING CASES OCCURRING IN OPHTHALMIC PRACTICE.

BY C. BELL TAYLOR, M.D., F.R.C.S.E.,
SURGEON TO THE NOTTINGHAM AND MIDLAND EYE INFIRMARY.

Cases illustrating the Treatment of Amaurosis by Hypodermic Medication.

CASE 1. — Henry H——, aged twenty-five, moulder, Rock Valley, Mansfield, was led into my consulting-room by his mother. He appeared quite blind, and could not distinguish large articles of furniture, such as mirrors &c., with which he was in close proximity; he could not guide himself, though he made out with some difficulty the large "A" of Snellen's type, a letter four inches long. On examination I found he was suffering from simple white atrophy of the optic discs in both eyes, and at once injected the twelfth of a grain of nitrate of strychnia under the skin of the brow; this was done night and morning for four days. On the evening of the fourth day he was rather behind time, and apologised by saying that he had been to see his mother off by the train, as he had no further occasion for her services; in fact, his sight improved so rapidly that he desired to return to work at the end of a week's treatment; I persuaded him, however, to stay a fortnight longer, after which he resumed his occupation. This young man had never learned to read, but he could readily make out letters of "pearl" type and see a considerable distance after a fortnight's treatment. He had been blind for six months, and there was no constitutional cause or cerebral defect to account for his loss of vision.

CASE 2. — Thomas A——, aged twenty-seven, private in the 14th Hussars; discharged from the service on account of imperfect sight two years ago. At the time of his discharge he could just guide himself, but could not see to salute his officers. After his discharge he got gradually worse, until he applied to me on Friday, June 12th, 1873, when I found that he could not distinguish the large "A" in Snellen's type, that he required a guide, and that, in fact, although he had good perception of light, all useful vision was abolished. I at once treated him by the hypodermic

injection of strychnine, and he speedily recovered sufficient sight to walk about alone, and was able to earn a little money by touting for a photographic establishment. After five weeks' treatment he had improved so much that he was able to take a situation as groom with my friend Dr. Forbes, of Eastwood. Here he remained until the meeting of the British Medical Association in London in August last, where he was examined by several gentlemen. In London he joined some of his former associates in the army, did not return to his situation, and I have not been able since to hear any tidings of him. The case was one of simple white atrophy of the optic discs—a diagnosis confirmed by my friends, Mr. Bader, of Guy's Hospital, and Mr. Brudenell Carter, of St. George's, who examined the patient with me.

CASE 3.—Chas. E. F——, aged thirty-five, from Uttoxeter, captain of a merchant vessel. Sight began to fail in July, two years ago, when at sea between Liverpool and London. On arriving in port he consulted Mr. Walker, of Liverpool; was somewhat improved at first, but was ultimately obliged to give up his profession. When I first saw him he could not see across the road or read anything less than letters a quarter of an inch in length. The lateral field of vision inwards was very limited, and there was partial white atrophy of both discs revealed on ophthalmoscopic examination. He was treated by hypodermic injections of strychnine twice daily for five weeks, after which I taught him how to use the hypodermic syringe himself, and he returned home, able to read Bradshaw or "diamond" type, and with excellent distant vision. This gentleman, who had quite given up his profession, has resumed work and gone to sea again as captain of a vessel.

CASE 4.—Elizabeth R——, aged thirty-two, had been under my care some time ago, and was discharged from the Eye Infirmary as incurable from white atrophy of the optic discs. On commencing to treat my patients with strychnine, I sent for this person again, and injected the twelfth of a grain of nitrate of strychnia twice daily. After three weeks' treatment she was able to walk to the infirmary without a guide.

It will be seen by the above cases that the treatment of amaurosis by hypodermic medication occasionally yields results almost as brilliant as those sometimes obtained by surgical operations. In many, however, apparently exactly similar we are doomed to disappointment, and it is impossible to say beforehand to which category any particular case may belong.

Case of Double Iridectomy at one blow without injury to the Lens in either Eye.

Samuel C——, aged forty-three, engine-man, while driving a portable engine, which was worked by a leather belt six inches wide, was suddenly struck across the face and eyes by the belt, which broke across, gashed both eyes, and removed a piece of iris from each, exactly as is represented in the woodcut. The patient was first seen by Mr. Unthank,

surgeon of the town, and subsequently referred to me. The eyes were merely bound up for a few days: no special treatment was adopted, and the patient speedily resumed work with but slightly impaired vision. Singular to relate, the lens was intact in both eyes, and no further damage done than if a portion of iris had been removed by a skilful surgical operation.

Park-row, Nottingham.

THE Local Government Board for Ireland have ratified the resolution of the Board of Guardians of the Naas Union of increasing the salaries of their medical officers by £25 a year each.

ON SULPHUROUS ACID AS A REMEDY FOR CHOLERA.

BY CHARLES R. G. PARKER,
SURGEON-MAJOR, H.M. MADRAS ARMY.

CHOLERA is a disease well known by name at least, and of late years has been a frequent though unwelcome visitor in Europe. The suddenness of its onset, the rapidity with which it runs its course, and its unhappily so frequently fatal termination, invest the disease with terror in the eyes of most persons, and render any reasonable attempt at suggesting a cure worthy of attention.

In bringing forward sulphurous acid in this capacity, I think I can show good grounds for expecting it to act as a specific in the disease.

In the first place, the qualities of sulphurous acid are worthy of note. "It is a powerful deoxidising agent, disinfecting and antiseptic, and destructive to vegetable life. It destroys the germs of fungi in wounds, and parasitic lichen on the skin."*

Should cholera be due (as some have supposed) to the presence of a fungus in the blood, which, rapidly multiplying, destroys its vitality, and causes separation of the serum from the corpuscles, we may imagine sulphurous acid likely to prove beneficial in the disease.

Secondly, it has been noticed that the workmen in the gunpowder manufactory at Madras enjoy a complete immunity from cholera (I am not acquainted with the condition of other gunpowder manufactories in this respect), and as in the process of manufacturing powder the compound is exposed to a very high temperature, as high as 500°, I believe, it is possible that the immunity is due to the constant inhalation of evolved sulphurous-acid gas.

But in the third place, the facts mentioned by Dr. Burg in his pamphlet "Du Cuivre contre le Choléra," as reviewed in THE LANCET of the 22nd November last, would seem to prove conclusively the immunity from cholera enjoyed by workers in copper. I venture, however, to differ from Dr. Burg in the conclusion arrived at, and in place of considering copper, or any salt of copper, as the prophylactic agent, I think I can show reason for that result being probably due to the influence of sulphurous acid.

The principal metals of commerce are gold, silver, iron, lead, mercury, tin, and copper. Of these, lead, mercury, and copper are the only ones obtained in quantity as sulphurets; there is a sulphide of silver, but it is not abundant. Copper is chiefly obtained from copper pyrites or native sulphurets of copper and iron, and is extracted from its ores on the general principle *of burning away the sulphur as sulphurous acid* (SO_2), and carrying away the iron by means of fluxes.

There is no mention in THE LANCET of what classes compose the 7500 (called workers in other metals), nor whether the lead- or mercury-workers (if any) escaped cholera; but as the cases amongst them amount to only 1 in 178·5, as compared with 1 in 138·5 amongst the workers in iron, it may warrant the surmise that the difference is due to sulphurous acid evolved in the manufacture of lead. I do not think there are any mercurial works in France, the chief sources of the metal being Spain, Carniola, and California.

It must, I think, be conceded that the fact of immunity from cholera being enjoyed by bodies of men engaged in two entirely different manufactures, in which, as far as we can see, there is no point of similarity but the evolution of sulphurous-acid gas, furnishes strong presumptive evidence in favour of sulphurous acid being the prophylactic agent. Again, if sulphurous acid be the probable agent in thus warding off cholera, is there not strong ground for hoping it will cure the disease, should it unhappily occur?

The British Pharmacopœia names half a drachm to a drachm of the aqueous solution as the dose; and this quantity, well diluted, might be given with as much frequency as practical experience may indicate.

As to prophylactic measures I need not say anything: disinfecting the sick room or ward by means of burning sulphur or sulphurous-acid spray, and disinfecting the

* *Vide* Squire's Companion to the British Pharmacopœia, art. Sulphurous acid.

clothing and discharges of cholera patients by similar means, are self-evident measures, should the grand point be settled—viz., that sulphurous acid is a cure for cholera.

At any rate I feel it my duty to lay these remarks before the profession; and should my theory prove correct, and sulphurous acid, by God's blessing, check the ravages of cholera, no one will be more thankful than myself.

Finborough-road, London.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo nos endi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

LONDON HOSPITAL.

REMARKS ON LIMITED CONVULSIVE SEIZURES, AND ON THE AFTER-EFFECTS OF STRONG NERVOUS DISCHARGES.

(By Dr. HUGHLINGS JACKSON.)

As observed by Dr. Hughlings Jackson in a paper in this journal (vol. i. 1873, p. 84) "On the Anatomical and Physiological Localisation of Movements in the Brain," we shall by the double method of studying the effects of destroying and discharging lesions (paralysis and convulsions) "not only discover the particular parts of the nervous system where certain groups of movements are most represented (anatomical localisation), but, what is of equal importance, we shall also learn the order of action (physiological localisation) in which those movements are therein represented." We must not only note the region affected by spasm, but also the sequence of spasm in that region. Such cases as those we are about to notice have their interest much increased by the brilliant researches of Fritsch, Hitzig, and Ferrier. The following quotation from Ferrier's masterly article in vol. iii. of Dr. Crichton Browne's West Riding Asylum Reports (p. 88-9) will show how his experiments bear clinically. After speaking of certain of his experiments, Ferrier says: "The bearing of these facts on the diagnosis of the exact seat of discharging lesions in the hemispheres, such as tumours, is evident. When epilepsy begins in the hand, and particularly if it frequently occurs in the same manner, and more especially if it sometimes remains localised in the hand and arm, we have every reason for diagnosing a discharging lesion of some part of the superior frontal convolution of the opposite hemisphere. If, in like manner, it has a tendency to begin and localise itself in the leg, the probability is that the lesion is in the homologue, in man, of the leg centre of the superior external convolution in cats and dogs. A tendency for the spasms to localise themselves in the eyelids and face would in like manner, in my opinion, point to some lesion of the middle frontal convolution, or its homologue, in man. If, on the other hand, it affects primarily the mouth and tongue, leading to disorders of articulation, it is in one or other lower frontal convolution, in the region of the fissure of Sylvius. The simultaneous discharge of all the centres will, of course, indicate nothing as to the seat of the lesion, for it need not depend on localised irritation."

The first case we have to note is one of paralysis after convulsion affecting chiefly the hand and forearm. The patient was a man forty-eight years of age, who, when in the hospital, had many attacks, several of which were witnessed by Dr. Hughlings Jackson, Dr. Stephen Mackenzie, and Mr. Kibbler. The man said he first felt a pricking sensation (he located it over the dorsal surface of the carpo-metacarpal articulation of the right index-finger). This feeling went to the fingers, and by the time it had reached them movements began. At first there was seen a general stiffening of the hand and fingers, but there was also slight tremulousness; it was chiefly tonic spasm. Then the index-finger straightened, but remained slightly flexed at its metacarpo-phalangeal articulation. The thumb drew in stiffly towards this finger; the other fingers were then curved inwards towards the palm. Later the spasm was clonic, and it must be mentioned that the two very good observers whose names are mentioned above are not certain, as Dr. Jackson declared himself, that an earlier stage of tonic spasm could be observed. Afterwards the forearm became pronated, and flexed on the arm. The upper arm was scarcely affected. There was, with these movements, a pain in the right knee, and the knee was seen to be spasmodically moved to a slight extent. There was no twitching in the face nor affection of speech, and no trace of loss of consciousness. With the spasm there was severe pain (cramp) in the hand.

This case shows, as other similar cases do, that clonic spasm can occur without any obstruction of respiration.

When all the movements had ceased, it was found that the right hand and forearm were almost entirely powerless. There was no obvious alteration of sensation, and the electric irritability (faradaism) was not diminished. The man was asked to get up and walk, and then it was seen by critical observation that the right leg dragged a little. There was no loss of sensation in the leg.

Fits beginning as the one above-mentioned did are, Dr. Hughlings Jackson says, often described by patients. They may be limited, or they may go on to universal convulsion. In Dr. Hughlings Jackson's case-book for 1862 is the following note of a father's account of his son's fits:—"In the beginning of the fit the index-finger of the left hand is pointed straight out, the thumb is approximated to it, and the other fingers are curled in, these fingers being twitched convulsively," &c. The following is an extract from an account which a hospital patient wrote of his first fit:—"I was taken with a sudden sensation in my right hand, commencing in my right [index] finger and thumb, which were drawn up together; from the hand it proceeded through the arm, until it reached the head, the right jaws [lips?] being drawn together, and my speech was quite gone, but I was still sensible to hear [what] was going on. It soon got down the side, dragging my ribs with the same kind of twittering, passing down the leg, and out at the toes."

Although Dr. Hughlings Jackson observed that in these remarks we are only concerned with the paroxysms, it may be stated that the last-mentioned patient died, and that atrophy of both sides of the brain was found. There was no local *gross* disease. Had the experiments of Fritsch, Hitzig, and Ferrier (*vide supra*) then appeared, Dr. Hughlings Jackson might have known which convolution to search for minute changes. Since this patient has died, he has recorded a case of fits beginning in the left thumb, in which a mass of tubercle in the hinder part of the third right frontal convolution was found post mortem.

We shall give next a note of a fit from an account written by another patient:—"I went to sleep in a chair, and was waked by great pain in the first and second fingers. Then the thumb became stiff, then came 'convulsions not to be seen at first.' After a few moments they became very strong, extending up the arm to the left side of the face," &c. The expression "convulsion not to be seen" no doubt applies to some kind of sensation preceding the spasm. A queer feeling is often experienced before the spasm starts; a patient will even believe that his face, when really still, is moving on one side, until looking in a glass shows him that it is not moving. There is, we may say, "nascent movement" from the incipient discharge of the nervous centre. There are, indeed, to be seen in different cases all degrees of movement of one side of the face, from what is little more marked than "live blood" to severe convulsion.

We will now quote the report of a fit which Dr. Hughlings Jackson witnessed, and has reported (St. Andrews Medical Graduates' Association Report, vol. iii., 1870). The absolute palsy of the arm after a fit, in which there was no trace of loss of consciousness, is an interesting feature.

"December 4th, 1868, a man, forty-eight years of age, was admitted for convulsive attacks, which he described very minutely. They were, by his description, like that on which the following observation was made:—One day when waiting his turn to be seen by the physician, his right hand began to twitch, the thumb and index-finger taking the lead. The fingers were soon partially flexed in a curve, except the index, which was straight, but flexed at its metacarpal joint; the thumb was straight too, but flexed also

at its metacarpal joint, and lay with the palmar surface of its terminal segment against the side of the index finger. Next the whole arm twitched, but it did not rise; the exact sequence of involvement of its several parts was not ascertained, as the man was dressed. In about two minutes from the first, the right side of the face began to twitch, but before movement of it was discernible, the patient said he felt 'it' in his face. The right eye was closed, the right cheek was drawn up, and both jaws came together. The mouth was drawn to the right (but whether before or after the meeting of the jaws was not noted), and its opening was ovoid, the wider end of the ovoid being to the right. The right ocular aperture was a little closer than the other, but both were narrowed. Both sides of the forehead were wrinkled upwards. There was no deviation of the head nor of the eyes; the leg was not affected, and the patient could talk in any part of the fit. He begged me to let the porter take hold of his hand—to unclench it—as the porter could manage it better. The fit ceased very suddenly. After the attack the arm, which was weak before the fit, was completely paralysed, quite limp, and fell forward when he stooped, and it had not recovered completely when he left the hospital fourteen days later. The patient's speech was not distinct before the fit, but it was worse after. It is not possible to say anything more definite about his speech than this, as the patient was a foreigner; what he said could be made out." The attack lasted some ten minutes.

The mode of onset above described was like what had been previously observed by the very intelligent porter of the patient's ward. The following is one of the porter's notes:—"Nov. 16th: Partial attack commencing in thumb and forefinger (right hand), after which the hand and arm became strongly convulsed, followed by the right cheek and eyelid; lower jaw slightly drawn to the right; did not lose his senses. Attack lasted ten minutes."

Speaking of the fit observed by Dr. Hughlings Jackson, we may note that the *sequence* of movements in the face is interesting. There was at one time a contention betwixt the unilateral muscles of the right side and the bilateral muscles of both sides, well exemplified by the ovoid mouth. (By unilateral we mean the muscles which *can* act independently, in great degree at least, of their fellows, and similarly for bilateral.) These facts accord with Broadbent's Hypothesis, which is also confirmed by Ferrier (*op. cit.*, p. 80). In this case the face was not paralysed after the fit; the palsy was of the part (arm) which had been most convulsed.

Dr. Hughlings Jackson believes that when the face is affected *after* the arm, the orbicularis palpebrarum is the part of the face which the spasm attacks first—illustrating Donders' remark on the association of the orbicularis palpebrarum (protecting the eyeball) in cases of "effort." He thinks that when the fit begins in the face, the orbicularis oris all round, or the cheek, is the part first in action. He does not state this positively. As is well known, the paralysis of the face in cases of hemiplegia from *destroying lesions* of the corpus striatum is always very imperfect. Dr. Jackson has, however, recorded a case of facial paralysis from disease of the convolutions near to this centre, nearly as complete as we ever see it from disease of the trunk of the portio dura nerve; but the "disease" in that case was of convolutions and *permitted discharge*; the palsy followed spasm beginning in the face (orbicularis oris).

The above facts as to *paralysis after discharge* have very important bearings. There is, Dr. Hughlings Jackson thinks, a definite relation betwixt the spasm and the palsy; the palsy is not the result of congestion of the brain nor of extravasations from stoppage of respiration—it is, he thinks, the result of the discharge itself. In epileptic hemiplegia, for example, he believes the strong discharge of convolutions has left the corpus striatum (the part discharged through) temporarily *hors de combat*.

WESTMINSTER HOSPITAL.

INCARCERATED HERNIA; OPERATION; RADICAL CURE.

(Under the care of Mr. HOLTHOUSE.)

S. S——, aged thirty-two, door-plate engraver, was admitted into Matthew Ward on Sept. 10th with a large incarcerated scrotal hernia of the left side. He stated that he had been ruptured for six years, and had worn an ordinary truss; but two weeks ago it broke, and the hernia descended, and he had been unable to return it since. On the morning of the 9th, after being at work for about two hours, the hernia began to increase in size and became painful, so that he was at length obliged to leave off his work and go home. A medical man, being called in, sent him to the infirmary of the workhouse, where he was placed in a warm bath, and the taxis employed, but without success. Ice was afterwards applied to the tumour, but with no better result. He was then sent to the Westminster Hospital, where Mr. Holthouse saw him twenty-eight hours after he was obliged to leave his work. There were no urgent symptoms, neither sickness nor pain, but he felt depressed. The tongue was thickly coated with a white fur, and there had been no action of the bowels since his seizure twenty-eight hours previously. The abdomen was soft, undistended, and free from pain, and a small quantity of food which he had taken had not been rejected. The scrotal tumour was large, red, tender, and hot, from inflammation, which had apparently been set up by the application of the ice. As he felt hungry, a chop, rice pudding, and milk were given him, and a pill of one grain of opium was directed to be given at night, and hot fomentations to be applied to the inflamed scrotum.

Sept. 11th.—There has been no sickness or pain; he retains his food, and the skin of the scrotum is less tender.

12th.—The tongue remains thickly coated, and the bowels have not yet acted; but he is free from pain, uneasiness, and sickness. To take four grains of calomel at bed-time.

13th.—Still no action of the bowels. A dose of house medicine was given him this morning, which he threw up half an hour afterwards, but he has not since been sick.

15th.—An enema was given, and brought away some scybala, but there has been no action of the bowels, and he has vomited twice since the morning. The inflammation of the scrotum having quite subsided, the taxis was tried, but without success. Under these circumstances Mr. Holthouse cut down upon the tumour and opened the sac, which contained no fluid or omentum, but a long knuckle of large intestine, very slightly congested, though otherwise looking healthy. The appendices epiploicæ presented a remarkable appearance, being greatly enlarged, and much altered in character, looking more like lumps of flesh than of fat. The obstruction was found at the external abdominal ring, which was slightly enlarged by the bistoury, guided by the finger as a director, and the bowel readily returned. The two pillars of the ring, together with the conjoined tendon and sac, were then tied together by carbolised catgut, and the ends cut short, while the incision through the skin was closed by silver-wire sutures in the ordinary way.

16th.—There has been a little oozing of bloody fluid into the loose tissue of the scrotum, but otherwise no unfavourable symptom. He is thirsty, but has no sickness. The bowels have not yet acted.

17th.—Bowels have acted twice spontaneously, and he is doing well.

18th.—There have been two more free actions of the bowels, and the patient continues to progress favourably, the tongue having become clean.

From the above date the patient made uninterrupted progress, and was discharged on the 30th of October, wearing a light truss for security, but without apparently any tendency to protrusion even when without this instrument.

LEEDS GENERAL INFIRMARY.

CYSTIC ENLARGEMENT OF THYROID BODY; EXTIRPATION; RECOVERY.

(Under the care of Mr. JESSOP.)

For the following notes we are indebted to Mr. Rhodes.

Irwin B——, aged seven, was admitted into No. 5 ward on Oct. 1st, 1873. The boy's mother has a slight enlargement of the neck, but this is found in no other members of the family. About four years ago the patient's neck began to enlarge to the right of the median line. For some time the increase in size was very slight, but during the last six months the tumour has grown with great rapidity, becoming firm and hard to the touch. The swelling was unaccompanied by pain, and had no injurious effect either on respi-

ration or deglutition. The child was always delicate, but was never so seriously ill as to require medical attendance.

On admission, a tumour, about the size of a small hen's egg, was found occupying the position of the right lobe of the thyroid body; it was round, firm, and very freely movable in all directions except away from the middle line, its only apparent attachment being at the larynx.

Oct. 2nd.—When under the influence of ether an incision was made about two inches in length over the tumour in the axis of the neck, down to its surface, and, on applying pressure, the mass readily protruded as by enucleation; but at its inner margin a broad and deep attachment prevented its complete removal. The pedicle was seen to consist of the same structure as the tumour, and crossing over it were several largely distended veins. A needle, carrying a strong double whipcord, was passed through the centre of the pedicle, which proved to be the isthmus of the thyroid body. The attachment was tied in two portions, and the tumour was then clipped away by scissors on the distal side of the ligature, the ends of which were left hanging out. The wound was then closed by sutures. In the centre of the tumour was a cyst containing a dark-coloured fluid. The solid portion was composed of hypertrophied thyroid.

13th.—The ligature fell away.

25th.—Discharged, with the wound nearly closed, and in a healthy condition.

Medical Societies.

PATHOLOGICAL SOCIETY OF LONDON.

TUESDAY, DECEMBER 2ND, 1873.

SIR W. JENNER, BART., K.C.B., PRESIDENT, IN THE CHAIR.

A REPORT was read by Dr. POWELL on Dr. Dowse's specimen of foreign body in the crico-thyroid pouch. The foreign body was the body of the cricoid, which had become ossified, necrosed, and detached.

Mr. WAREN TAY exhibited a boy, aged five years, who had suffered from Necrosis of the Lower Jaw. The boy had been first seen in February last; he was then under the care of Dr. Cayley for a short time for some febrile disturbance. At the end of three weeks the gum over the lower jaw was seen to be ulcerated. Soon afterwards part of the lower jaw was bare. This went on, and several teeth, and some of the alveolus, were picked out by the child. In five or six months more there was evidence of new bone forming underneath. In two or three months more Mr. Tay removed the old jaw by dividing it on each side, first removing the central piece, and then the condyle on the left side. The child had done well; there was at present good up-and-down movement. This was a somewhat rare occurrence. He could not say what was the cause; the child said he had sucked matches. Necrosis may follow the exanthemata or other cachectic states.

Mr. MAUNDER, referring to the formation of new bone, said that three years ago he had removed part of the lower jaw through the mouth, from a girl aged eleven, for a myeloid tumour. He had taken care to leave the periosteum; but no new bone had formed. Also, in a second case, in which the same operation had been performed on a woman aged thirty-two, four months ago, no new bone had formed.

Mr. NUNN showed a large Tumour from the right pectoral region. It was removed at the post-mortem examination from a woman; it was beneath the pectoral muscle and the fascia; the mammary gland was not connected with it. During life it was supposed to be cystic, and was tapped by the aspirator two or three times. It looked like colloid, but was an enchondroma.

Mr. MARCUS BECK said the patient was at University College Hospital nine months ago. The aspirator was used; the tumour was diagnosed as a softening enchondroma from the microscopical examination of the fluid and the character of the growth.

Dr. CAYLEY said that when the tumour was removed no cartilage could be seen by the naked eye; it was a soft, gelatinous mass. Under the microscope cartilage cells were detected. (The specimen was referred to the Morbid Growth Committee.)

Mr. ANDREW CLARK showed a case of Lymphoma infiltrating the Trachea, for which tracheotomy was twice performed. The patient was a woman aged seventy-five, who, when first seen, had a swelling in the middle line of the neck, moving with the larynx; the glands were enlarged; she had occasional attacks of dyspnœa. She improved under treatment; but dyspnœa coming on again, she was admitted into Middlesex Hospital, and tracheotomy was performed in one of the attacks of dyspnœa. She did well, and went home, the swelling nearly all gone. She was readmitted for bronchitis; the attacks of dyspnœa returned, and tracheotomy was again performed. She died exhausted. A tumour was found reaching from the third ring of the trachea to the bifurcation, behind it, and on each side; some small nodules were visible on the mucous membrane; the growth was lymphomatous.

Dr. PAYNE exhibited a specimen showing Pouches of the Peritoneum. Pouches of this kind may give rise to hernia and fatal results. The specimen was removed from a woman who died of no disease connected with it. Two pouches are seen between the ascending colon and the abdominal walls, and a third above these. Three kinds of these pouches are described: the most common is the duodenal; the next the subcæcal, the two layers of the meso-colon being separated; the third, the subsigmoid. There is a good preparation of the first in St. Thomas's Museum, which was put up by Sir A. Cooper. The pouch was full of the intestine, though there was no obstruction.

Dr. PAYNE showed a specimen of Thickening of Pulmonary Artery, from a woman who died from puerperal metritis. The lower lobe of the right lung was solidified. The whole of the branches of the pulmonary artery going to that part of the lung had their outer coat thickened, surrounded by a thick zone of some material of a greenish-fibroid consistence; the thickening of the artery was not noticed in the other part of the lung, or in the healthy one. The material looked like recent syphilitic gumma. There was no history of syphilis, nor did the post-mortem show any evidence. Under the microscope there was seen nuclear material in some parts, in others amorphous, opaque substance; the air-cells were full of a fibrinous material. There was nothing to point out a specific disease.

Dr. PYE-SMITH said that Lancereaux describes a similar change in the lungs of infants dying of syphilis.

Dr. GREEN asked if the bronchi and the alveolar walls of the lower lobe were also thickened. From examination of the specimen all the lower lobe appeared changed, as though from chronic pneumonia. Perhaps the patient had had chronic pneumonia, or pleurisy; in such cases the new fibroid growth is around the artery.

Dr. DOUGLAS POWELL said that all the branches of the pulmonary artery were blocked by clots. Was that secondary, or had it to do with inflammation of the vessels? Were the bronchial vessels thickened? The pulmonary artery, as well as the bronchial tubes, is thickened in chronic pneumonia.

Dr. PAYNE said there was a great deal of general induration of the lung, chiefly at the lower surface; the thickening was most marked around the large branches of the artery; the pleura was not much thickened; the change apparently differed from chronic fibroid pneumonia. The arteries contained clots, but he could see no signs of degeneration in them or evidence of age; he thought it was only the blood that was in them at the time of death. The bronchial tubes did not appear thickened.

Dr. LOCKHART CLARKE showed some microscopical sections of the Spinal Cord—good specimens of the morbid change called Sclerosis, from a case of subacute inflammation of the cord. The posterior columns were much altered and full of compound granulation-corpuscles, and nearly all the grey substance diseased. In reply to Dr. Dowse, who asked what were the symptoms during life, Dr. Clarke said there was gradually-increasing paralysis, great contraction of the limbs, especially the upper; the paralysis became general; there was no cerebral sclerosis and no mental affection. The case was of two or three years' standing.

Dr. DOWSE said he had made an autopsy of a patient who had shown no symptoms of spinal sclerosis; there had been twitchings of the facial muscles, as in chorea. The patient died of phthisis. He found a watery fluid in ventricles and subarachnoid space of brain and cord; the arachnoid was

united to the pia mater and thickened; the grey substance over the hemispheres could be peeled off from the brain, and the brain-substance was much altered.

Dr. PAYNE referred to a case to show the ambiguity of the symptoms, though sclerosis was discovered. A woman died of bedsores, and was said to have dislocated the hip. The spinal cord was much altered—the change was visible to the naked eye; masses of grey matter were scattered irregularly through the cord.

Dr. KING exhibited a specimen of large Abscess of Liver without ulceration of intestines. It was taken from a woman aged fifty, who was admitted into the Middlesex Hospital. Her illness was said to have begun ten days previously. She was weak, and complained of a pain at the epigastrium, of eructations and anorexia; there was tenderness over the liver, which was enlarged, reaching to the umbilicus; no bulging or fluctuation; urine albuminous. A rigor came on one evening, the only one she had; and the temperature remained high. She became worse, and died in a day or two, collapsed. The liver weighed 5 lb.; right lobe much enlarged; on section a large quantity of pus poured out from a cavity. The intestines were vascular; no ulceration or cicatrisation could be found in the large or small intestine.

Mr. ARNOTT showed a Sarcoma of the Omentum. The specimen was taken from a boy aged four. His mother brought him among the out-patients, saying that, in washing the child, she had noticed a hard lump in the stomach. The child had been quite well, only complaining of lassitude and a pain in the abdomen. There was a mass felt in the centre of the abdomen, dull on percussion, the size of an orange, around the navel; there was no irregularity of the bowels. It was supposed to be tabes mesenterica or some fæcal accumulation. At the next visit a nodule in the skin above the umbilicus was noticed. He at once diagnosed it as a secondary sarcomatous nodule, and told the friends of the gravity of the disease. The child was taken into St. Thomas's. He played about, but was soon wearied. After two weeks the nodule was much enlarged, and adherent to the mass beneath. A week after collapse came on suddenly, and the child died the same day. A flat tumour three-quarters of an inch in diameter was found under the skin, and a large tumour in the omentum; the transverse colon was involved in the growth and ulcerated. The tumour was soft, white, and opaque. In the kidneys were two or three small tumours; the testicle was enlarged by a new growth involving the epididymis and the spermatic cord. He thought the growth had started in the submucous tissue of the colon, and then spread into the adjoining tissues.

Mr. MORRANT BAKER showed an Oxalate-of-Lime Calculus which he had removed from a boy aged eleven. The mass consisted of oxalate of lime in a pure crystalline form, and was very rare; there are only three such in the College of Surgeons' museum. The boy had had symptoms of stone for six years, and had been twice sounded, but nothing was found. After he had removed the stone he found a pouch in the mucous membrane at the situation of the right ureter, and in this probably the stone had lodged.

Mr. COUPLAND showed disseminated Nodular Growths in the Liver associated with Tuberculosis of Lung. The specimen was from a man who had suffered from ascites. For this he was tapped, and seven pints of fluid removed; the fluid reaccumulating, he was again tapped and died of exhaustion. There was no history of syphilis. At the autopsy the peritoneum was thickened and opaque, spleen and liver adherent to the diaphragm. The liver weighed 50 oz., slightly granular, yellowish white, with nodules scattered over the right lobe. On section more of these were seen, and the liver substance presented early condition of cirrhosis. The spleen was enlarged. The mesenteric glands enlarged and degenerated. In the upper lobes of the lungs old induration. The deposit in liver was either tubercle or syphilitic; he was inclined to think the latter. (The specimen was referred.)

THE large and extensive additions in the shape of a new wing to the Chesterfield and North Derbyshire Hospital were formally opened last week by a public meeting in one of the wards.

Reviews and Notices of Books.

My Diary during the last great War. By W. H. RUSSELL. London: Routledge and Sons.

LOOKING back now on the great Franco-German war, we find few more prominent figures in it than the English special correspondents with the German army. Regarded with suspicion and distrust at first, they soon, by their honesty no less than by their talents and enterprise, won the respect and esteem of the puissant leaders of the mighty Teuton host. When, in 1870, "red battle stamped its foot" there was excitement in Fleet-street and bustle in Printing House-square; and with wondrous rapidity a band of accomplished gentlemen, most of them accustomed to sing of arms, had crossed the Channel to chronicle the deeds of the contending armies. *Facile princeps* among these correspondents is Dr. Russell, whose graphic letters in *The Times*, supplemented as they are by the contributions of Mr. Forbes and of Mr. Skinner to other papers, form a mass of reliable information touching the stupendous events of the last great war which no future historian of the struggle can afford to ignore. It is curious to contrast their narratives with the ravings of the French correspondents, among whom Edmond About was the greatest sinner. The general impression conveyed by Dr. Russell's book—an impression strengthened by the light of more recent events—is the conviction that, next to the superior organisation of the German army—that marvellous machine which neglected nothing, from bomb-shells to boot-jacks,—the other factor in its triumph was the utter incapacity of those sybarites whom Napoleon III., with deplorable fatuity, entrusted with high command in his army. Had that army when on the frontier possessed such men as Soult and Massena, the result of the conflict might have been different. The only gleam of hope which the French enjoyed during the campaign was their solitary success at Orleans—a success that brings to mind the repulse of that little army of invaders long ago which, after having so stoutly and persistently upheld the military supremacy of England, was at last vanquished by a woman.

It is well known that the English ambulance did good service around Paris; but perhaps it is not so well known that its efficiency was often hampered by the official system of the Germans. The following extract will give our readers an idea of the condition of a town after a battle, and of the trying duties to be performed by those who elect to serve under the Red Cross:—

"Sedan, Sept. 8th and 9th.

"The stench which came from the streets exceeded toleration. The reeking atmosphere seemed laden with disease; one could smell decomposed animal matter; filth around, above, below; ..... typhus, small-pox, and cholera quite abundant; ..... utterly out of the question to look for admission into any house."

Dr. Russell's experience controverts the rather popular belief that men after violent death acquire a placid expression of feature. The faces of many of the dead soldiers he saw after Sedan bore the impress of mental and bodily agony. The dire horror of war, stripped of its pomp and glitter, is painfully illustrated in the following extract:—

"There were human hands detached from the arms and hanging up in the trees, feet and legs lying far apart from the bodies to which they belonged. A dead Lancer had his head on a mangold wurzel, and his knees were drawn up towards his chin; his eyes were wide open, and he seemed to be inspecting curiously the head of a Turco or Zouave, which, blown clean off, lay in his lap with the tongue out and the teeth set in it."

May such sights never be witnessed in our sea-girt isle.

OUR LIBRARY TABLE.

Elementary Treatise on Physics, Experimental and Applied. For the use of Colleges and Schools. Translated and edited from Ganot's "Éléments de Physique" (with the author's sanction) by E. ATKINSON, Ph.D., F.C.S. London: Longmans, Green, and Co. 1873.—This treatise is too well known and appreciated to require any special notice beyond the fact that the present edition has received numerous additions, both in the way of letterpress and illustrations. Those parts referring to physiological electricity have, the editor states, been revised, and in a great measure re-written, by Dr. Martin, of Christ's College, Cambridge. Altogether the sixth edition of Ganot's Physics is in every way an excellent book for students of physical science.

The Monthly Microscopical Journal. No. LX. December, 1873. Edited by HENRY LAWSON.—This part includes:—1. Further Researches into the Life History of the Monads, by W. H. Dallinger and J. Drysdale. 2. Remarks on the Art of Photographing Microscopic Objects, by Alfred Sanders. 3. Immersed Apertures, by F. H. Wenham. 4. On the Crystals in the Testa and Pericarp of several Orders of Plants and in other parts of the Order Leguminosæ, by George Gulliver. The form of monad of which the life history is described by Dallinger and Drysdale is that found in vast numbers in the putrefying fluid resulting from the maceration of any of the cod tribe, especially when the maceration had proceeded for two or three months. This form has a long oval body with two flagella. It usually multiplies by fission, but here and there a few larger ones appear. These become quiescent, at first amœboid and then spheroidal; a small cone of sarcode shoots out, dividing and increasing into another pair of flagella; the disc splits, each side becomes possessed of a nuclear body, and two well-formed monads are set free; these swim freely until they attach themselves to an ordinary form that has just completed fission, so that the nuclei are approximated. Sarcode and nuclei melt into each other, the form becomes free-swimming and triangular in shape, rests, loses its flagella, becomes clear and distended, then bursts at the angles, pouring out indescribably minute granules, from which myriads of new forms arise and repeat the cycle.

Selections for Latin Prose, with occasional Critical Questions, taken from the Woolwich, Sandhurst, and direct Examination Papers and other sources. By R. M. MILLINGTON, M.A. Third Edition. London: Longmans, Green, Reader, and Dyer. 1870.—These selections are good and specially adapted to those engaged in studying for the various army examinations, and to the senior students for the Oxford and Cambridge Local Examinations. Exercises of this kind, if honestly undertaken, are most useful in enabling students to write Latin, and write it intelligently. The efforts of students in this direction are too often the results of cram only.

On the Origin and Metamorphoses of Insects. (*Nature* Series.) By Sir JOHN LUBBOCK, Bart., M.P., F.R.S. London: Macmillan and Co.—This is one of what promises to be a capital series of useful works. It consists of excellent papers that have already appeared in the columns of our contemporary *Nature*. The author says that, whatever differences of opinion there may be as to the views he has put forward, the facts on which they are based will, he believes, be found correct. The illustrations, printing, and general "get up" of the book—the illustrations especially—are extremely good.

SCARLATINA has lately been rather prevalent in Dublin, 23 deaths having been registered in the week ending the 22nd of November.

New Inventions.

SAVORY AND MOORE'S MEDICAL AND SURGICAL COMPANION.

THIS article has been designed specially for the use of officers and others at the seat of war; but it is equally well adapted, and promises to prove a most valuable companion, to travellers at all times and in all countries. The case is constructed on a novel principle, and folds up into the smallest space when it is considered how complete a supply of necessary and useful remedies and appliances are packed in it. The case measures exactly 6 in., and contains no less than *seven* different kinds of medicines, all in the form of pills; likewise a sufficient supply of surgical appliances for the temporary treatment of most external injuries pending the arrival of a surgeon. The prescriptions adopted have been selected from eminent medical authorities with special reference to the diseases most likely to be encountered during the exigencies of the Ashantee war; amongst others, the pills from the formula of Dr. Livingstone, which he reported to be so efficient in all cases of bilious remittent fever occurring in that climate. There is also a goodly stock of quinine in the shape of pills; whilst the surgical appliances are properly confined to such matters as admit of being easily applied by a non-professional person.

The Medical and Surgical Companion may be easily carried in the pocket or knapsack; and it is so contrived that the contents may be separated, and the surgical portion made available without the medicines, or *vice versâ*.

Very considerable ingenuity has been displayed in the construction and arrangement of this article; but we think that, as a surgical companion, its usefulness might be still further increased by substituting for some of the articles a triangular bandage, a few folds of lint, with two small pieces of the same material spread with a little carbolic-acid ointment, and a few pins—in fact, very nearly the articles furnished in Esmarch's first field-dressing.

CHEAVIN'S WATER FILTER.

THE extensive adoption of this effective water filter absolves us from the task of pointing out its merits. From personal experience of its use, we can attest the efficiency and rapidity with which it renders river, rain, pond, or canal water wholesome and sweet. It materially reduces hardness, while retaining the sparkling qualities the water owes to carbonic acid. It can be cleansed in a few minutes by anyone with scarcely any trouble or expense, and its purifying power is said to last for twenty years. When we add that its cost brings it within the reach of the most modest purse, we have said enough to commend it to very general favour.

METROPOLITAN DISPENSARIES.

THE CAMBERWELL PROVIDENT DISPENSARY.

DISPENSARIES are so distinctly before both the public and the profession at the present moment, that we think it desirable to make some special inquiries into the working of them. We shall not pretend to visit them all, but, in the person of our Commissioner, we shall hope to visit a certain number of such of these institutions as may be fairly taken to represent the rest. We shall try to do even-handed justice between the old-fashioned free dispensary and the more modern institution known as the provident dispensary, which is reasonably expected by many to benefit greatly both the working classes and the medical profession. Our reports will not be long, as in writing them we shall aim at stating facts rather than drawing conclusions. When we have all the facts before us, we may draw some conclusions from them.

On Saturday morning, November 29th, about noon, we

visited the Camberwell Provident Dispensary, on Camberwell-green, which was founded in 1862. Amongst the prominent founders were the Rev. D. Moore, Dr. Nicholls, and the late treasurer, F. C. Hills, Esq., whose recent removal from the locality is much regretted by the friends of the institution. By Rule 2, members must reside within a circle the radius of which extends one mile and a quarter from St. Giles's Church, Camberwell. The nearest dispensary is at Brixton, one mile and a half off, and the nearest hospital two miles and a quarter off—St. Thomas's. By Rule 13, the medical officers, six in number, must reside within the same limits. Members are divided into two classes—honorary and benefited members. Speaking generally, the former pay the working expenses and govern the institution—electing its officers and constituting exclusively its committee; the latter receive the medical advantages. The cards of membership last year were 1900, representing 5696 benefited members. Up to Saturday, Nov. 29th, cards had been issued to the number of 1900; so that an increasingly large number of people seem to avail themselves of the dispensary. The test of fitness applied to applicants for the benefits is the simple one of wages. A member must not have more than 30*s.* a week. We saw in the list of members the name of a charwoman whose wages were 10*s.* a week. There is no inquiry into the circumstances of the applicants; a mere declaration is considered sufficient. Not many fall out of membership. Slight irregularities in payment, by involving fines, add rather to the funds of the dispensary. The patients are very grateful for the work done by the medical officers. As we have said, there are six of these, and no consulting officers. Patients choose their own doctor, and may not change during illness. Each doctor attends two days a week; in other words, on each day two doctors attend. On the day of our visit, Dr. T. W. King and Mr. W. J. Stothard were just finishing the seeing of patients at the dispensary, and very courteously gave us information as to the institution. Dr. King, who has the largest number of patients, estimated that in that day he would see about 56 dispensary patients—namely, 46 at the dispensary, 6 at their own homes, and 3 or 4 at his house. This is a rather smaller number than usual. Last year 156 midwifery cases were attended. The patient, in midwifery, pays 10*s.* and the general fund 5*s.*; making, in all, 15*s.* Originally the medical officers received £1 1*s.* per case, but owing to the insufficiency of the general fund they agreed to take 15*s.*; Rule 27 providing that the contributions of the benefited members shall be paid quarterly to their respective medical officers, *provided that the funds of the dispensary are sufficient to cover its expenses.* Should there be a deficit, the committee have the power of subjecting these contributions to a deduction not exceeding 25 per cent. Midwifery fees are liable to the same deduction, and, as we have seen, are actually subjected to it at present. Sick persons can become members by a payment of 5*s.*

The dispensing is done by one dispenser, who gets £60 a year out of the general fund. He works well for his salary, being engaged about six hours a day. Some facts in the dispensing department are not without interest. The prescriptions dispensed in July were 2996, in August 2723, and in September 2381. Drugs are provided out of the general fund, and seem to be given freely. The dispenser informed us that they use six ounces of quinine a month; two gallons of spirits of wine a month; less than a pound of iodide of potassium a month; two gallons of cod-liver oil a month. The favourite medicines in use just now seem to be spirits of chloroform and compound tincture of camphor. Of the former, no less than three pints a week were used; of the latter, a Winchester quart a week. We believe in the economy of using the best drugs; but these quantities of spirits of chloroform and compound tincture of camphor are, it seems to us, rather excessive, and likely to beget an objectionable taste for medicines containing them.

The medical men last year received £117 as midwifery fees, and £488 10*s.*—in all £605 10*s.* The distribution of this will be seen below.

The general result of our inquiry was that this is a useful, popular, and well-conducted institution. The working expenses last year, not including the payment of the medical men, for this institution—benefiting, say, 6000 people,—amounted to £304. But we regret to say that this does not include a balance due to the treasurer of £213. The subscriptions amounted to £192 4*s.* 2*d*; the church collections to £162 9*s.* 3*d.* The charitable funds seem to have been chronically inadequate to meet the working expenses—a fact which we commend to the consideration of those ardent believers in the provident principle who think that it can be entirely relied on to work dispensaries.

The following remarks by the Secretary, Mr. Wyeth, in answer to questions, are interesting and instructive:—

"With regard to your first question—The proportion of patients attended by each medical man and the money received by him?—Members on joining choose their medical attendant, and their subscriptions are carried to his account, with the following result for 1872:—

No. 1	.....	2139 patients	.....	£166	3 0
„ 2	.....	1251 „	.....	97	13 2
„ 3	.....	1104 „	.....	82	14 6
„ 4	.....	747 „	.....	55	1 6
„ 5	.....	336 „	.....	28	10 8
„ 6	.....	120 „	.....	7	18 0

(Exclusive of midwifery fees.)

"2nd. The extent of the population supplied?—Our district comprises a radius of one mile and a quarter. The number of population I can only conjecture; the northern and eastern parts are densely peopled; the southern is a very respectable neighbourhood, from which we draw few patients, but the greater part of our honorary subscribers.

"3rd. The number of deaths per annum?—I regret that, owing to a change in our medical staff, I have only been able to obtain a return for one year—viz., 1872. Number of deaths, ninety-six.

"4th. Do the medical officers retain their appointments long?—One-half (three) of our staff have resigned in the last nine years.

"5th. Do people with less than twenty shillings per week keep up their payments?—Yes, I think better than those with higher wages, for many of them are old and infirm, requiring frequent medical attendance; while the well-paid robust people are apt to get in arrear. Many also of the poorest class of our members, especially elderly women, have their cards paid up for them regularly by charitable people who take an interest in them.

"6th. Do members of Provident Dispensaries join other Benefit Societies?—This I am unable to answer authoritatively, but I know that a large proportion are members of penny banks, coal and clothing clubs, &c.

"7th. Is our district richer or poorer than the average?—I should think about an average one; as I said before, a large part is very poor, but the south part is comparatively wealthy. Any other information in my power I will gladly furnish."

UNQUALIFIED PRACTITIONERS.

ON Tuesday last, at the Halifax County Court, before Mr. Serjeant H. Tindal Atkinson, the case of the Apothecaries' Company of London *v.* Richardson was set down for hearing.

Mr. Godfrey Rhodes appeared for the plaintiff, and Mr. England for the defendant. It appeared from the opening of Mr. Rhodes that the defendant, Mr. James Richardson, had for some time past carried on the practice of a surgeon and an apothecary at Elland, near Halifax, he not being duly qualified, and that the proceedings had been instituted by the plaintiff to recover the sum of £20, being the amount of the penalty which the defendant had rendered himself liable to pay by reason of such practices. The defendant carried on an extensive practice, and the leading practitioners in the parish of Halifax signed a memorial to the Apothecaries' Company, requesting that these proceedings should be taken, with a view to prevent the defendant from continuing his practice, and from invading their privileges with impunity. The defendant had visited patients and dispensed medicines, and had made the usual professional charges for attendances. He had, however, thought fit to pay the penalty, and the matter now came before the Court as to the question of costs. Mr. Rhodes stated that the money was not paid five clear days before the Court day, and submitted that he was entitled to costs. His Honour made an order for payment of costs.

THE LANCET.

LONDON: SATURDAY, DECEMBER 13, 1873.

WAS there ever a harder lot than that of the medical student, called upon as he is to make himself a walking cyclopædia in four years, and liable to be remitted to his studies if he cannot stand a severe examination at the end of that curriculum? Just think of what he has to learn. No fewer than ten subjects, all of them regarded as of equal importance on the examination-day, all of them gaining from year to year in bulk and complexity, each of them sufficing of itself to absorb the study of a lifetime. With less preliminary culture than the future barrister or divine, he has to encounter a professional curriculum infinitely harder than theirs, incessantly varying in the character of its contents, and constant only in the ratio of its increasing difficulty. To say that he learns a single one of his ten subjects at all satisfactorily is absurd. Even if he acquires a firm hold of the main principles of one of them, it must be at the expense of nearly all the rest—by reserving, in fact, for the adequate acquisition of one the time meant to be divided between ten. The model student, according to the standard traditionally created for him, is he who, having attended the regulation number of lectures and perused the regulation number of text-books, just remembers enough of them to pass an equally superficial examination in all. Knowledge, in the true sense of the word, he has none—except, perhaps, the knowledge that he has much misspent time to retrieve, much useless reading to forget, and the essentials of his professional qualifications to acquire.

Professor HARVEY, of Aberdeen, has come to his rescue in an earnest and, we would fain hope, an effective way. Following up the train of thought embodied in his letters to Sir JAMES CLARK some fifteen years ago, he recommends that the student on the very threshold of his studies should be made and kept practically cognisant of the fact that his goal is the prevention or cure of disease, and, not, as he is apt to think, anatomy, or physiology, or even pathology as such. This is Professor HARVEY'S first postulate. His second is that the time allotted to the curriculum should be not less than four years. His third is that due regard be taken to the relative value of the several subjects of study in relation to the ultimate goal; while his fourth implies the possibility of mastering sufficient knowledge to begin professional life upon at the age of twenty-two years. Tested by these four conditions, Professor HARVEY concludes, and we think justly, that the system of medical education traditionally handed down and still enforced would be found wanting, and that the result of an inquiry—such an inquiry as that which a select committee of the House of Commons would institute—would be the enactment of another system of medical education and examination widely different from that which now prevails throughout the kingdom.

Professor HARVEY'S scheme is unsatisfactory in one particular. He omits to state the amount or degree of preliminary training with which the student should enter on professional study. This is a most important point. Between the well-grounded scholar and mathematician and the smatterer in philology and mathematics there is all the difference, on the professional curriculum, between the thorough-bred and the under-trained race-horse on the turf. Formed habits of study will give the student an advantage which no amount of mere natural ability will countervail. Professor HARVEY, however, does not tell us on what subjects these habits are to be moulded. Indeed, he almost leads us to suspect that he would support Professor HUXLEY'S ill-advised scheme of thrusting botany and zoology into the grammar-school curriculum to the exclusion of the old classics and mathematics, whose masculine and refining discipline the so-called sciences of observation can never replace. Such is not the mode to which the LATHAMS, elder and younger—to whose authority he justly defers,—themselves conformed as students, or would recommend to be adopted by the rising generation. Neither will it, let us hope, find favour with the illustrious University into whose system Professor HUXLEY threatens to import it. Better postpone the year at which medical study is commenced to that at which the future divine or barrister begins his professional curriculum. The "loss of time," as it is called, will be more apparent than real. The experience it gives will protect the student from many of the mistakes or fallacies into which the imperfectly trained mind is prone to fall.

> "Præstat Trinacrii metas lustrare Pachyni
> Cessantem, longos et circumflectere cursus,
> Quam semel informem vasto vidisse sub antro
> Scyllam et cæruleis canibus resonantia saxa."

Dr. LATHAM'S recommendation to limit the range of each subject in the student's curriculum is that adopted by Professor HARVEY in his scheme, as the best fitted to meet the main difficulty in medical education. Let it be the duty of any competent body—the General Medical Council, for example—to draw up and periodically publish schedules defining the range within which the examiner shall restrict himself in each separate subject; so as to leave out the superfluous and retain nothing that cannot be mastered thoroughly by the student in a given time, and then the examination may be as rigid or exacting as you please. A thorough grounding would thus be secured to every student in the essentials of his profession; while the standard of attainment so acquired—the perception of what knowledge of a subject means—would exercise a wholesome influence over all his further or collateral studies. In the great seat of learning with which the name of GOODSIR is associated, the scheme proposed by Dr. LATHAM has virtually been in practice for years. The student is enabled to form a pretty clear judgment of what his teacher regards as essential, and to economise his energy accordingly. The London University seems by its severely-exacting ordeal to demand too much in each department from the student, and, admirable as is the degree to which it gives its imprimatur, it tends, perhaps, to crush the spirit of independent investigation often developed in pre-graduation years. The little band of physiologists which within the last decade has done such brilliant work in Edinburgh, owes its existence not so much to

the inspiration and example of GOODSIR—great as these were—as to the fact that a system of examination not too severe or too comprehensive enabled its members to prosecute independent inquiry while advancing in the professional curriculum. For, after all, the old distinction between education and instruction has but to be observed to replace the pernicious practice of cramming by the wholesome habit of leading-out the faculties, strengthening them by congenial exercise, and rendering the acquisition of knowledge easy by the continual perfecting of its instrument.

No part of anatomy has received greater attention, and certainly no other part has been more beautifully elucidated by the application of new and improved means of research, than the serous membranes. Formerly held to have no other function than that of furnishing a smooth and well-lubricated surface, enabling parts that are subject to movement to glide easily over each other, they have been demonstrated by RECKLINGHAUSEN to represent great lymphatic sacs, and to possess a highly complicated structure and very important relations. RECKLINGHAUSEN'S statements were founded upon observations made on membranes stained with nitrate of silver; and his conclusions have been corroborated by LUDWIG and SCHWEIGGER-SEIDEL, DYBKOWSKY, DOGIEL, BÖHN, and quite recently by KLEIN, who has just published a valuable essay upon these membranes as a portion of a complete work upon the Lymphatic System. Dr. KLEIN'S attention had long been directed to this subject, having contributed an essay upon the serous membranes in STRICKER'S Handbook of Anatomy, which has been translated by the Sydenham Society. The present work is the result of a research by Dr. KLEIN at the request of Dr. BURDON-SANDERSON at the Brown Institution in connexion with some pathological inquiries for the Medical Department of the Privy Council.

The chief points of novelty and interest in Dr. KLEIN'S treatise, which is enriched by ten plates containing many beautiful and original drawings, are—first, that the endothelium of the free surface of the omentum, centrum tendineum of the diaphragm, and pleura mediastini does not everywhere present the well-known flat, tesselated character; but that in many places there are groups of polyhedral, club-shaped, and even short columnar cells, with granular contents, ovoid nucleus, and bright nucleolus. This peculiar form of epithelium Dr. KLEIN terms "germinating epithelium," because numbers of spheroidal cells may be seen in the act of separating or actually detached which in all respects resemble lymph-corpuscles. The lymph-cells thus lying free in the interior of the great serous sacs make their way into the lymphatic system through small openings distributed over the membrane, bounded by peculiar cells, which instantly call to mind the *stomata* of plants, and to which the same name has been given. In the female frog many of the cells present the peculiarity of being ciliated, and they have been observed to perform amœboid movements. In the next place Dr. KLEIN describes the cellular elements of the *matrix* of the serous membranes. These he represents as forming tracts, patches, or nodules by the accumulation of more or less flattened and branched cells, each lying in a cavity of the matrix but little larger than itself; the cavities communicate by passages, and contain, besides the above-named cells, lymph-corpuscles; the whole corresponding to RECKLINGHAUSEN'S lymph canalicular system. These, being outside the true lymphatic vessels, though in close relation with their walls, he terms perilymphangial nodules and tracts. In some parts a still higher grade of organisation is reached, the cells developing within lymphatic vessels, and the matrix becoming a reticulum, and containing numerous lymphoid corpuscles, so as to form a kind of adenoid tissue, as Dr. SANDERSON has elsewhere described. Finally, in the highest form or stage of development, the nodules become vascularised, the matrix consisting of a reticulum of large branched cells, the spaces of which are filled with fluid or a limited number of lymphoid corpuscles. Both the last forms of tissue he terms endolymphangial tracts or nodules.

Thus it is seen that just as in hydrocephalus the structure of the brain is unraveled by the accumulation of fluid, so in the serous membrane we have a lymphatic gland opened out to our view. In one part the free surface is found to be covered with germinating cells, which develop into lymphoid or white blood-corpuscles; in another are structures—the perilymphangial nodules—closely resembling the cortical portion of the ordinary lymphatic glands; and in yet another, the endolymphangial tracts and nodules are vascularised structures identical with the medullary portion of the lymphatic glands. In all, the production of lymphoid corpuscles takes place actively, and the whole may therefore be regarded as ministering to the production and development of blood.

Amongst the points incidentally touched by Dr. KLEIN are the mode of development and extension of capillary blood-vessels, which he shows to result from the hollowing out of the branched cells of the matrix, the end of the capillary dipping, as it were, into the substance of the cells which is expanded around them. And, again, he gives an interesting description of the mode of development of the fat-cells and tracts which exist in such large amount in the omentum. The second section of the work is occupied with the pathological condition of the parts we have described above.

A DEPUTATION from the Obstetrical Society has been trying to impress Mr. STANSFELD with the urgency of the want of a better class of midwives for the poor. We have long urged the same thing. And somebody, personal or corporate, is terribly to blame for allowing this question to remain unsettled. While colleges are standing upon their dignity, as the College of Physicians did once on a time with regard to licensing general practitioners, women are suffering every week, and often dying, at the hands of the midwives who attend them, and who are intensely ignorant of the very first principles of hygiene and of the nature of the parturient process. Every now and again a case comes to light which shocks the public. But the great majority of evils connected with bad midwifery never come to light. They affect only the poor, who in many instances are themselves too ignorant to suspect the cause of the troubles that come to them through bad management in childbed. And the troubles themselves are of too delicate a nature to be obtruded; to say nothing of the power of endurance, which

is one of the marvellous virtues of the poor. So much the greater is the responsibility of the licensing bodies and of ministers of State for permitting the perpetuation of a condition of things which is a disgrace to the country, and unlike anything which obtains in countries of equal civilisation. The most ignorant man or woman may appropriate the titles which indicate a fitness for this branch of practice, and in no way violate the Medical Act.

Mr. STANSFELD expressed himself convinced of the necessity of some scheme. The suggestions made by the deputation included provisions for the instruction, examination, licensing, registration, and supervision of midwives. It was intimated by Dr. TILT and Dr. AVELING that, though the College of Surgeons had power by its charter to examine midwives, it declines to assume such a function. The deputation expressed the willingness of the Obstetrical Society to undertake the duty of examining and licensing midwives. We have never approved of this duty being discharged by an irresponsible and voluntary body. But if the existing licensing bodies decline it, there is something to be said for assigning the work to the Obstetrical Society. There is still much, however, to be said against it; and it would be better by Act of Parliament to create a board of examiners for this purpose, or assign the duty of creating such a board to the General Medical Council. The Obstetrical Society is a scientific body, and will best discharge its important functions without encumbering itself with the cares of an examining body.

The difficulty which we all feel is in the creation of a semi-medical class without the thorough education which is more and more felt to be essential for the right practice of any branch of medicine—even the obstetric, which Mr. STANSFELD seemed to think a mere waiting upon nature. One half-hour with a case of obstetric hæmorrhage or of arm-presentation would soon correct this notion. It is simply obvious that the reduction of the mortality of lying-in women is due to the scientific study of the parturient state. On the other hand, it is equally obvious that a large number of women cannot command the services of medical men, and that it is the duty of the State to take steps to create the best class of midwives—i. e., midwives whose intelligence shall come nearest to that of completely educated medical men. No doubt such a class will have great faults—they will be apt to be conceited, thinking that they know everything while knowing nothing quite satisfactorily, but they will not be so certain to do mischief as the present race of midwives.

We cannot forbear expressing our satisfaction at Mr. STANSFELD'S resolution to refer this question to "another department"—the Privy Council. We can only hope that this resolution implies an intention to act similarly in regard to other questions in State medicine which have gone sadly backward since they came under the influence of Mr. STANSFELD'S department. The Obstetrical Society would have been unworthy of its name if it had not brought this subject under the notice of the Ministry. Mr. STANSFELD has promised to bring it under Lord ABERDARE'S notice, and it will be discreditable if something is not done in the coming session of Parliament. We should not like to say a word to diminish Mr. STANSFELD'S newly acquired diffidence in undertaking the charge of medical questions; but there is one thing which he might urge, and that is, that, after the lapse of a reasonable time, no midwife should be employed by Poor-law guardians who is not qualified and registered.

THE number and variety of the suggestions that one encounters in the daily journals, *apropos* of the health of the soldier on the Gold Coast, are surprising, not to say perplexing. Still, these various communications—even the worst of them—are not altogether without their use, if they serve to excite even that amount of thought necessary to set them aside as impracticable. A campaign in a country so confessedly malarious as that of the Gold Coast has, naturally enough, led to its being asked whether there is such a thing as malaria at all. Surgeon-Major OLDHAM, who has written a very good and thought-exciting book on the subject, is one of those who hold that there is no such thing as malaria, and that it is only another name for "chill"; and as this "chill theory" has much that is plausible about it, it is capable of being represented as a consistent and satisfactory explanation, so long as its advocates have the management of their own case; but its opponents are able, it seems to us, to adduce facts which will not at all square with this "chilly" view. Prof. MACLEAN had little difficulty, therefore, in indicating some of its weak points. Call it what you will, there is a something intimately associated with certain conditions of soil which manifests itself in human beings exposed to its influence after an unmistakable fashion. There is not only the singular stamp of periodicity to be considered, but there is the long catalogue of sequelæ to be taken into account, in the shape of enlarged spleens and livers, anæmia, and those disorders of various kinds which often mimic very closely structural diseases of the nervous system and different organs, but which differ from such diseases in being readily amenable to remedies and means which have been proved useful in ague. On the one hand, our patients may have been exposed to "chills" any number of times without their being followed by this chain of morbid phenomena; and on the other, malarious disorders may be manifested in individuals without the occurrence of "chill." A chill in certain parts of Italy is a very different thing from a chill in this country, and those instances in which malarious disease has been apparently contracted through water as a vehicle must not be lost sight of. When the Panama line of railroad was being laid, the necessary disturbance of the soil was associated with the production of an enormous amount of disease among the labourers. In China, again, it is scarcely an exaggerated statement to declare that you need only scratch the soil at certain seasons of the year to contract ague. In New Zealand the diurnal variations of temperature are often very great, but malaria is unknown there; and there are many places which would seem to possess all the requisite conditions of soil and climate to give rise to malarious diseases, yet they are exempt from such diseases. Roughly speaking, a water-logged soil is peculiarly liable, under certain conditions, to generate the agent which causes aguish fevers; but what that agent is we know not, for it has defied the skill of the chemist and microscopist to detect it. One practical fact

remains, however, on any view—viz., that the protection of the body against "chill" is of the first importance in places where aguish diseases are rife, and of equal importance is good food and plenty of it.

Medical Annotations.

"Ne quid nimis."

THE COLLEGE OF SURGEONS AND PRELIMINARY EXAMINATIONS.

WHAT accident can have befallen Mr. Gay's committee? Our readers will remember that in August Mr. Gay carried a most important resolution for a committee of inquiry into the large yet unequal numbers of students rejected in their preliminary examinations. No inquiry could be more kind to students or more instructive to the public, and, we will add, more important to the profession. But, if we may judge from the report hung up in the hall of the College, this most desirable inquiry is not to take place. The College has a very remarkable, and, to our thinking, a most objectionable, practice of allowing a motion passed at a previous meeting to be rediscussed on the motion for the confirmation of the minutes. And Mr. Gay's motion, it would seem, was rescinded at the meeting subsequent to that at which it was carried. It is not creditable to a body to spend its time rescinding at one meeting what it carried at a previous one; and we hope some member of the Council will induce the College to deprive itself of a power so absurd and apt to be abused. Meantime, if the Council so little knows its own mind, and will occupy itself in undoing its own acts, we trust that it will exercise itself in the rescinding of resolutions less urgent and less commendable than that of Mr. Gay for inquiry into the rejections at the preliminary examinations.

THE SEWING MACHINE.

SOME few years ago one of the London Hospital physicians called attention to the fact which had come under his notice repeatedly among the out-patients under his care, that the use of the sewing-machine was injurious to the health of those who habitually employed it for many hours together. The patients suffered from nervous debility and other symptoms referable to its employment, and admitted that the constant exertion which necessarily occurred in using heavy double-actioned machines had an exciting and exhausting effect upon them. These statements were somewhat strongly denied at the time, but we think the almost universal adoption of hand-worked machines in family life since that date shows that there was a pretty general feeling among the profession, and probably the public too, that the exercise required of young ladies in order to work the treadle machine was not calculated to improve their health. Facts which have recently come to our knowledge show that the evil was no imaginary one, and that many workers at the sewing-machine or machines of a similar character do suffer very materially in their health. One of the heaviest forms of machine is, we believe, that employed in "braiding," and young women working in this department have suffered very materially, and have been compelled to discontinue the employment. But the distress is not confined to one class of *employées*; it seems to affect pretty generally all those who use the feet alternately as the motive power of their machinery. If the workers themselves or their immediate supervisors were to speak out, there would, we believe, be abundant evidence found that "machining" is a most exhausting employment, and one which gradually breaks down the health.

When it is considered how great the employment of sewing and allied machinery by female operatives is, and that many city houses have dozens of them in their establishments, it is obvious that the evil we have referred to is not a slight one. We would be the last to interfere with the female labour market, always overcrowded as it is with needy sempstresses; but it is not unreasonable to ask whether, in the case of large establishments employing dozens or even hundreds of machines, it would not be possible to adopt steam as the motive power, and to retain the female hand only as the guide of the machine thus set in motion. If a steam-engine can drive many spinning-machines or looms, one does not fancy there could be much difficulty in giving the necessary motion to sewing or braiding machines, the work of which is not one whit more intricate.

NOISELESS PAVEMENT.

THE battle of the pavements promises to be a fierce and protracted one. The advocates of wood paving declaim against the dangerous nature of asphalte, and point to what every one in Cheapside on a wet day can corroborate, —viz., the large number of horses lying helpless on the pavement often receiving irreparable injuries, and always blocking up the traffic. Those who uphold asphalte, on the other hand, urge that wood pavement is far more costly, is very expensive to keep in order, while its average duration does not exceed five years. It is, moreover, liable when rotting to give off very foul effluvia. Wood pavement has been in use in the streets of New York for several years, the material in every instance being previously saturated in petrifying solutions. The plan, however, was not very successful—a result probably owing to the defective drainage of New York, which must have had a powerful influence in causing disintegration and decay of the wood.

The London cab and omnibus proprietors, and carmen and drivers of horses generally, who appear thoroughly agreed as to the objectionable character of asphalte, will shortly memorialise Parliament and the Metropolitan Board of Works to refuse any extension of the pavement, and to remove that already laid down. Cogent arguments against its use have been advanced by the General Omnibus Company, whose manager states that since the introduction of asphalte the loss of the company in horses has very greatly increased.

A report which is about to be issued by the city engineer on various paving materials will probably contain some practical information and suggestions. We have no predilection for any one material, but earnestly hope that some substance will very shortly be found possessing the necessary requirements of noiselessness and durability, and in the manufacture of which the question of economy shall not be allowed undue weight. The sooner such a pavement is laid down in that throbbing artery of London—the Strand—the better. The worry to those engaged in literary pursuits, caused by the noisy transit of wheels over stones and granite, is injurious alike to thought and temper, and induces a tension only relieved when, as the Bigelow Paper has it, "Silence, like a poultice, comes to heal the blows of sound." We would urge on the metropolitan authorities the desirability of forming a cordon of pavement around the hospitals, infirmaries, and public institutions for the reception of the sick, which shall protect the inmates from the din and clatter of the street traffic. The injurious effects of street noise on patients can hardly be exaggerated. We are glad to observe that the London Hospital authorities have already taken the initiative in the direction we

have indicated, and have commenced laying a roadway to supersede granite in the streets surrounding the hospital. The work unfortunately, however, must now be stopped pending the decision of the Whitechapel Board of Works on the merits of wood and asphalte.

PROFESSIONAL REMUNERATION AT PLYMOUTH.

A RECENT annotation on "Professional Remuneration" evoked a letter from Mr. William P. Swain of Devonport, in which he charged the physicians of Plymouth with lowering the whole scale of professional remuneration of the neighbourhood, by giving as many as four, or even five, visits for the single guinea fee. This complaint was supported by Mr. Cutcliffe and denied, so far as concerned himself, by Dr. Clay, who, however, admitted that the custom of the consultees of the neighbourhood was to give a second visit in consultation for a single fee *if required*, and to give three visits for the guinea when attending alone. There are, we believe, at least two other gentlemen practising in Plymouth as physicians, and as neither they nor the gentlemen who very worthily hold the positions of consulting surgeons have made any sign, we are reluctantly compelled to believe that the statements contained in Mr. Swain's and Mr. Cutcliffe's letters are at least founded on fact.

We certainly sympathise with the difficult position in which physicians in the provinces are placed by the fact that the consulting surgeons are not debarred, by custom, from the practice of midwifery. In fact, the names of the men who act solely as pure surgeons in the country might be counted on the fingers of one hand. The successful general practitioner becomes, by force of holding a hospital appointment, the surgical luminary of the neighbourhood, and too often continues to take low-priced midwifery whilst acting as a consultee in both medical and surgical cases. We believe, therefore, that the surgeons in the provinces are quite as much to blame as the physicians for the latter's low scale of fees; for how can the physician stand upon his rights when Mr. So-and-so, of universal genius and large hospital experience, charges three shillings a visit and takes half-guinea midwifery? *Noblesse oblige* is an old adage with much truth in it, and we believe that the leading members of the profession, both in London and the provinces, would find their account in being anxious to make their practices more select than universal, and there would then be less of that cut-throat competition between grey-heads and young beginners which too often embitters professional life.

"DRUNK OR DYING."

IF the public is not satisfied, it has much cause to be gratified at the result of the prosecution of the policemen charged with having illegally arrested Mr. Belt. The inquiry has disclosed many things calling for immediate rectification. The question of locking up an excited man on the plea that he is intoxicated is one for the public to consider, but the refusal of his request to be allowed the services of a medical man is a matter which more closely concerns the profession. The sergeant of the police made the strange confession that, though Mr. Belt was intoxicated, he was "master of his senses," but could not be permitted to see the police doctor. Sir Thomas Henry, in summing-up the evidence, remarked that he thought that the medical attendant of the police (who, by the by, was in the police-station at the time) should have been instructed to examine the prisoner. It appears, however, that there is a distinct rule against police doctors examining drunken men. Now, we grant that frequently there is no difficulty in determining that a person is intoxicated; but, on the other hand, it is sometimes almost impossible to distinguish between the excitement and the stupefaction of inebriation and the delirium or coma of disease. Further, it does not necessarily follow that because a person is even incontestably drunk he is not also ill. An intoxicated person may receive injuries which, though serious, may not declare themselves during the stupefaction produced by drink, or a person who has been "indulging," but who is not intoxicated, may receive injuries sufficient to make him dull and stupid. It is not our wish to increase unnecessarily the responsibilities of either the police or their doctors by asking that every case of drunkenness should be examined by a medical man, but we do insist that when a person, be he drunk or sober, makes a special request to see the doctor he should not be denied.

THE CAUSES OF DECAY OF TEETH.

IT has been charged against our brethren of the dental specialty that they are wofully at fault in regard to knowledge of the commonest of all things—caries of the teeth. That they extract teeth with skill, and stop them with even more skill, and in a nobly conservative spirit, is admitted; but the causes of decay in the teeth have remained obscure. The investigations of Leber and Rottenstein into this subject have at least the charm of pointing to definite conclusions. We have read their work in the form of an American translation by Dr. Thomas H. Chandler, D.M.D., Professor of Mechanical Dentistry in the Dental School of Harvard University, and published by Trübner. They admit, of course, that there are differences of teeth, constitutional and connected with race, making teeth more or less resistant to the great influences which determine decay. These are not, according to these authors, internal or vital so much as external and chemical. The process of decay begins from the surface, and if it can be controlled or arrested at the surface it is entirely controlled. The great causes of caries are two—viz., acids and a certain fungus found abundantly in the mouth, the *Leptothrix buccalis*. This latter agent is characterised by certain microscopic appearances and by its reaction with iodine and acids, which give to the elements of leptothrix a beautiful violet tinge. Under the microscope the fungus appears as a grey, finely granular mass or matrix, with filaments delicate and stiff, which erect themselves above the surface of this granular substance so as to resemble an uneven turf. The fungus attains its greatest size in the interstices of the teeth. No one can deny nowadays the action of acids on the teeth, even weak acids, in dissolving the salts of the enamel and the dentine. All acids, both mineral and vegetable, act promptly on the teeth. Various experiments as to the action of acids on dental tissues are given, making the enamel, naturally transparent, first white, opaque, and milky, and, in a more advanced state, chalky, and then the dentine more transparent and softer, so as to be cut with a knife. The acids which may actually effect the first changes in the production of caries are such as are taken with food, or in medicines, or such as are formed in the mouth itself by some abnormality in our secretions, which should be alkaline, or by an acid fermentation of particles of food. But acids alone will not account for all the phenomena of caries in the teeth. They play a primary and principal part, making the teeth porous and soft. In this state, the tissues having lost their normal consistency, fungi penetrate both the canaliculi of the enamel and of the dentine, and by their proliferation produce softening and destructive effects much more rapid than the action of acids alone is able to accomplish. It is not pleasant to think that fungi exist in the mouths of all but the very cleanest people. Bowditch, in

examining forty persons of different professions, and living different kinds of life, found in almost all vegetable and animal parasites. The parasites were numerous in proportion to the neglect of cleanliness. The means ordinarily employed to clean the teeth had no effect on the parasites, whilst soapy water appeared to destroy them. If this be a true version of the causes of caries—the action of acids, supplemented by the action of fungi—then it follows that the great means of preserving teeth is to preserve the most scrupulous cleanliness of the mouth and teeth, and to give to the rinsing liquids a slightly alkaline character, which is done by the admixture of a little soap. This is not so pleasant a dentrifice as some, but it is effective and scientific. Acids not only dissolve the salts of the teeth, but favour the increase of the fungi of the mouth. No increase of fungi and no action on the dental tissues occurs in solutions slightly alkaline, such as a weak solution of soap. The good effects of stopping teeth, in the light of these experiments, are intelligible. The penetration of acids and fungi is prevented.

SIR ROBERT CHRISTISON.

OF the changes recently made in the constitution of the General Medical Council, none is more noteworthy than the retirement of Sir Robert Christison and his replacement by Dr. James Warburton Begbie. Sir Robert held in some respects a position unique in the Council. He was, if we may use the term, its most "academically-minded" member. His very conservatism was of the academic stamp—that is to say, his opposition to innovation as such was always based on an accurate knowledge of University traditions and a reluctance to depart from them unless good cause was shown for the step. In the *vexata quæstio* of medical education he was invariably the advocate and supporter of a liberal preliminary culture for the medical student, while he laid far lighter stress on the modern system of cramming, with a view to a successful pass-examination, than many of his younger colleagues. Given punctual attendance on the classes and the clinic, given the favourable impression that an intelligent and diligent student must make on a competent teacher, and the ordeal of written or oral question and answer had far less importance for him as a test of real proficiency or aptitude for professional work than the most brilliant feats of the *memoria technica*. As one of the most accomplished pharmacologists of the age, the Council will miss his knowledge, his practical judgment, and his clear criticism; but the precedents he has established in many an animated discussion will remain, while their spirit will be effectively caught up and perpetuated by the eminent physician and scholar on whom his mantle has so appropriately fallen.

CHILDREN IN WORKHOUSES.

THE advocates of the boarding-out system for pauper children have their case strengthened by the facts brought to light in a Parliamentary return moved for last session by Mr. Gilpin, and recently issued. From this return it appears that in some union workhouses corporal punishment is inflicted on children so young as eight, seven, and even six years of age; while instances are given of little ones of the tender ages of four, five, and six years being under "industrial training." What may be the precise nature of the industrial training in such cases is not clear upon the face of the return, the probability being that the meaning of the word "training" has been misapplied in relation to these infants. So with the corporal punishment, of which there are degrees only to be rightly estimated as applied to particular cases when we know the sort of person administering it. And it is fairly open to question, without leveling a charge of hard-heartedness wholesale against workhouse masters and matrons, whether it is wise or humane to entrust them with the charge of very young children in numbers too great to preclude the idea of anything like the personal interest and attention which are essential to the health, comfort, and happiness of childhood. Clearly, on the score of economy, the workhouse system for children is a failure, if it be true, as stated on the authority of a recent Parliamentary return, that a comparison of the cost of the 2500 pauper children who are at the present time boarded out in different parts of the country with the cost of the children maintained in several of the large district schools, shows a weekly rate per head of five shillings among the former as against ten shillings among the latter.

The movement in favour of the boarding-out system (at any rate for girls) is spreading, and we are glad of it for several reasons, not the least of which is that in one of the conditions of its success we think we see a means whereby much may be done to enlighten the poor upon matters concerning which they are now profoundly ignorant. The boarded-out children must be looked after, to guard against neglect of education or of health, and the formation of lay visiting committees (in which ladies take the chief part) which is found to work so well for the interests of the children, can hardly fail to produce a good effect upon the homes where they are visited, in respect of attention to cleanliness at any rate.

ANTI-VACCINATIONISTS.

AT a meeting of the Board of Guardians of the Banbury Union, held on Thursday, the 6th instant, a petition signed by 700 persons was presented to the Board, asking them not to enforce the provisions of the Compulsory Vaccination Act, and, in consequence, Mr. Charles Gillet moved, and Mr. Brazier seconded, the following resolution:—"That this Board do not in future direct prosecutions against those persons who object to have their children vaccinated." The votes were—sixteen in favour of it, and nine against; it was therefore carried by a majority of seven.

For the sake of the law-abiding, not to say the sensible, portion of the inhabitants of Banbury Union, it is to be hoped that the rebellious behaviour of the guardians will be brought under the notice of the Local Government Board. Meanwhile Banbury may be recommended as a place of residence to the anti-vaccinators. It is a pity that they cannot all live in one union, and be deprived of the protection against small-pox which they owe to the wisdom of their parents.

The Board of Guardians of Gainsborough have again distinguished themselves in opposition to the Vaccination Acts, by resolving not to rescind a resolution which they passed in 1872, not to prosecute parents who did not comply with the law. To the credit of the board, this resolution was only carried by a majority of two, many of the guardians speaking sensibly and well in favour of the Vaccination Acts. The *Retford and Gainsborough News* reports Mr. Mawer as saying that the Local Government Board have resolved not to compel boards to apply the Acts. Mr. Mawer seems to be deep in the confidence of the Local Government Board; for he "was able to inform" the guardians that, next session, a member of the Government would bring in a Bill to repeal the Vaccination Acts. We confess that we have no faith at all in Mr. Mawer's knowledge of the intentions of the Government, or even of the Local Government Board. The sensible people of Gainsborough should know that anti-vaccinationists are simply preparing for the town, and for the profit of the medical

profession, a great crop of small-pox. The profession will do well, in such places as Gainsborough and Banbury, to charge high for attending cases of the disease.

THE HEALTH OF OUR TROOPS ON THE GOLD COAST.

THE information contained in letters from our correspondents had to some extent prepared us to expect that Sir Garnet Wolseley would probably incur a mild attack of fever by his exposure to the sun and hard work. In the absence of any positive information as to the nature of the attack, we may safely assume, as he was recovering, that it was slight. His presence on board the *Simoom* need afford no cause for alarm, for we suspect that the doctors well knew what they were about in transferring him to that ship for rest and treatment. In the first place, it is far healthier to be on ship-board than on shore; and, in the next, an energetic man like Sir Garnet, who does not feel much the matter with him, is tempted on shore to be looking after others when he should be looking after himself. The late marches and skirmishes have given the medical service something in the way of an experiment as to the amount of sickness and inefficiency they may expect among troops operating in the field, and the doctors are said to be satisfied with the results. Public opinion appears now to have swung to the opposite extreme in regard to the danger to health of this undertaking. From declaring that everybody was to die or be invalided, it is now prophesied that the loss in these respects will be utterly insignificant. We have all along taken the middle course, because we believe it to be the most probable one. We declared that the disastrous results attending the short experience of the Marines at the beginning of the war need not, and should not, be taken as the measure of what we must expect in the future. A certain loss from bilious remittent fever we can hardly hope to escape, and much temporary inefficiency from slighter attacks of fever is very probable; but no one can prophesy the amount with any degree of certainty. So far our experience has realised the reasonable hopes of the medical service, which have apparently been founded upon a calm consideration of information from all available sources.

DR. BIRKBECK'S FOUNDATION.

LORD CARNARVON presided the other day at the fiftieth anniversary of this Literary and Scientific Institution, and after distributing the prizes to the successful candidates—many of whom were young ladies—he addressed the meeting on the great subject of scientific education. Thanks to the noble initiative of Dr. Birkbeck, no fewer than one thousand institutions similar in design and working have been established throughout the kingdom, with what benefit to the people, only those who can compare the diffusion of knowledge fifty years ago with that of the present day can adequately appreciate. The catholicity of these institutions is one vital point in their favour. Limited neither by sex nor class, taking in nearly every subject in their programme, they enable almost everyone to qualify himself for the vocation in life to which he is called, or to cultivate rational and refined tastes in the intervals of business. While, however, in sympathy with the demands of the age, their teaching becomes more and more scientific, and they afford ample opportunities for mitigating by literature and art the hardness which the scientific habit of mind is apt to produce. One point on which Lord Carnarvon might have touched is one which more nearly concerns our own profession—to wit, the greater time saved for purely medical studies by the student's acquiring in these institutions his chemistry or natural history before and outside, rather than in the midst of, his professional curriculum. How much may be learned at home or by the less formal modes of tuition has been recently exemplified by the autobiography of John Stuart Mill, a work which Lord Carnarvon thinks a mournful one, for the sacrifice of so much that is really masculine and devout incurred by the almost exclusively intellectual education of its subject.

A GRATUITOUS MEDICAL OFFICER OF HEALTH.

THERE has been a good deal of denunciation lately of the benevolence that gives advice gratuitously to individuals. What shall be said of the benevolence of medical members of a Town Council who help the Corporation to disobey or evade the law which requires it to appoint and pay a medical officer of health by offering to do the work for nothing? If it be wrong to pauperise an individual, how much more wrong must it be to pauperise a borough. Dr. Reid, a member of the Town Council of Pembroke, to save the ratepayers, has actually offered to give his services gratuitously. Another medical man—Mr. Reynolds—supported this proposition by withdrawing a resolution of his own, to the effect that the appointment of a health officer be deferred for a month. The Town Council adopted a motion expressing a hope that, as two medical gentlemen had in November been placed on the Sanitary Committee, the Local Government Board would be content this year for the borough to go without a medical officer of health. The Town Council of Pembroke must have a very uncomplimentary notion of the weakness of the Local Government Board if it thinks that it can be influenced by such an argument as this. We shall not say what we think of medical men in corporations who act as Mr. Reynolds and Dr. Reid have done in this case.

BATHS FOR EAST LONDON.

A CROWDED public meeting was held the other day in Spitalfields with the object of promoting the provision of baths and washhouses for East London. The Rev. Canon Kingsley, who presided, remarked that five times as much water as we required came down from the sky, and not one-twentieth part of it was utilised for drinking, bathing, or any other purpose. In moving a resolution affirming the desirability of reopening and placing on a permanent footing the baths and washhouses in Goulston-square, Lord Fitzmaurice, M.P., said, with reference to the Baths and Washhouses Act, that he did not believe in permissive legislation, and if provision of that kind was to be made it could only be done successfully by the people taking the matter in hand for themselves. He urged that the Corporation of the City should be applied to in the present case for assistance, and a resolution was ultimately adopted that a deputation should wait on the vestries of Whitechapel and the adjoining parishes to ask for their co-operation in reopening the baths and washhouses in question. It was further resolved to make a special effort for the collection of subscriptions in aid of the movement.

A YOUNG MOTHER.

MR. C. MACNAMARA relates, in a late number of the *Indian Medical Gazette*, that he was called to see an infant child of nine weeks old belonging to a native gentleman residing in Calcutta. The mother of this infant was only ten and a half years of age. The child was born, it is alleged, after a labour of six hours' duration, and the mother has proved an excellent nurse. Mr. Macnamara states that he has often known instances in which Hindoo females have had children when twelve and thirteen years of age, but he

never remembered meeting with so young a mother before. In this house, too, there were present five generations; and he knew another instance of a similar kind, where the head of the family was an old lady, who had sons and daughters to the fifth generation living in the house with her, and numbering last year no less than 107 people. A fact of this kind, he may well add, must seem almost incredible to Europeans of the present day, and yet Mr. Macnamara assures us that in India such facts are by no means uncommon.

EXAMINATION OF POTABLE WATERS.

A NEW method of determining the oxidised nitrogen in water has been recently described in the *Chemical News* by Mr. Bolas, of Charing-cross Hospital; and it is probable that its simplicity and delicacy will render it useful to medical officers of health and others having occasion to examine water.

A saturated solution of ferrous sulphate is mixed in a flask with ten times its volume of pure sulphuric acid, and the solution is allowed to cool; after which the clear liquor is decanted from the salt which deposits; the solution being then labeled "nitric-acid test." The water to be examined is next mixed with an equal volume of pure sulphuric acid, and, after cooling, 80 cc. of this are mixed in a tall jar with 20 cc. of the nitric-acid test. An olive-brown tint indicates the presence of oxidised nitrogen, and the intensity of this tint is proportional to the amount of oxidised nitrogen present; but to determine the amount of this, comparative experiments must be similarly made with artificial waters containing known quantities of nitrogen in the form of nitre. By dissolving 7·2 grammes of nitre in a litre of water, a solution, containing one part of nitrogen in one thousand, is obtained; and, by mixing this with water, it is easy to obtain a solution of any required dilution. If this method of testing is used, qualitatively of course, no comparison is necessary, and experience soon enables the operator to form some idea of the amount of oxidised nitrogen by a mere inspection of the tint. One part of oxidised nitrogen in ten million parts of water may be detected by the method now described.

MADEIRA FOR THE SICK AND WOUNDED.

WE believe that there is no intention of establishing a large sanatorium at Madeira for sick and wounded men from the Gold Coast. The object of the authorities is understood to be to make provision for such cases as would be unfit to run the risk of the severe weather that may be anticipated at this season. It is probable, therefore, that the hospital establishment will be a small one, suitable for these requirements, and for temporary purposes only. It is alleged that some cases of a similar character will be forwarded to Gibraltar, if necessary; if so, the project strikes us as a good one, for the climate is excellent, and the amount of available hospital accommodation large.

HOPE DEFERRED.

THE most trying part of that ordeal which is now established in nearly every walk in life—namely, an examination, is the miserable waiting and hope-deferring which the candidate has to undergo pending the verdict of the examiners before whom he had so lately quaked. The result of the Preliminary Examination of the College of Surgeons held a few days ago will not be known for the next three weeks—three weeks of anxious suspense to the aspirant and his friends. It is perfectly absurd to contend that such a lengthened period is necessary to establish the merits and demerits of the papers submitted at such an examination. We believe that in the Civil Service Examinations matters are even worse, and that a period of six weeks or more often elapses before the tidings of joy or disappointment are conveyed to the competitors. Is it not time that a reform should be made in a system which works so slowly and painfully?

BEWILDERED SANITARY AUTHORITIES AT WHITEHAVEN.

THE Whitehaven sanitary authorities seem to be in a state of utter bewilderment and confusion. A woman with two children affected with small-pox in the streets of Cleaton Moor, and a man in the harbour of Whitehaven living in a boat, suffice to throw the whole sanitary authorities of the district into discord, and, we will add, great discredit. The woman was allowed to wander about, and was referred by one authority to another, till an innkeeper, more tender-hearted than the authorities, took her into an out-house. He was repaid by one of his servants taking small-pox through carrying victuals to the woman and her children, by the loss of business when it came to be known that he had the disease on his premises, and by being very coldly treated when he made a modest demand of £5 from the Board for expenses. The man living in a boat was allowed to wander about the streets in the rain for several hours with small-pox, and was then sent back to the boat till the sanitary authorities, rural, urban, and harbour, could determine to whom the responsibility attached. There is no excuse for these authorities, as they have had fever and small-pox enough for the last twelve months to teach them their duty.

THE COCCYX AND IMPERFORATE ANUS.

IN this malformation it is often extremely difficult to find the lower end of the intestine. To facilitate this search, Professor Verneuil, of Paris, removes a portion of the coccyx. Whether this resection in case of recovery may not prove inconvenient to the patient remains to be seen. But this method seems to be gaining ground, for M. Tarnier, an eminent obstetrician, lately showed at a meeting of the Surgical Society of Paris a preparation from a child upon whom the operation had been performed. The lower end of the intestine was found, and much meconium escaped both by the artificial anal orifice and the urethra. The child died, but the aperture allowing a common action between bladder and rectum was not discovered. Surgically speaking, the operation was successful, but Prof. Depaul expressed a strong opinion that the removal of a portion of the coccyx in these cases is bad practice and quite unnecessary.

THE VALUE OF EUROPEAN LIFE IN INDIA.

WE learn from the *Madras Times* some facts in connexion with the Standard Assurance Company which strongly corroborate the views we have promulgated on this subject. In a memorandum setting forth the company's experience of the rates of mortality in India during the first twenty-four years of its business in the country, it is stated that from 1846 to 1870 the company paid claims on 131 deaths among their civil lives, and the secretary to the company states that the number of deaths that would have occurred among persons of the same age in England is sixty-nine.

DANGERS OF PUBLIC VACCINATORS.

DR. WARD, the deputy medical officer of the Blyth district, has been assaulted by a miner in consequence of his attempting to vaccinate a child of the miner in both arms. The relieving officer stated that it was a common thing for vaccinators to be obstructed in the discharge of their duties.

The Board acted loyally to the law and to their officer by resolving to summon the offender before a magistrate. It is possible that the miner may have been suffering from an extra glass of champagne, which seems to be the fashionable drink of that thriving class at present. This is not a reason, however, for foregoing the sobering ordeal of taking him before a magistrate.

DISPENSARIES AND THE HOSPITAL SUNDAY FUND.

CANON MILLER'S Committee seem to be going very thoroughly to work in trying to determine the merits of dispensaries in relation to the hospital fund. A circular letter has been issued to each dispensary, free or provident, requesting full particulars of (1) income, (2) expenditure, (3) work done, (4) number of medical officers, (5) enrolled members, in case of provident dispensaries. The authorities of dispensaries will do great service by very carefully filling up these forms.

LORD COLVILLE.

ON Friday last the injured eyeball of Lord Colville became the seat of great pain, which by Sunday had increased to such a degree that Mr. Bowman deemed it necessary to extirpate the globe, in order to remove the pain, and preserve the opposite eyeball from the dangers of sympathetic irritation. Since then the progress has been satisfactory in every particular.

COMMODORE COMMERELL'S HEALTH.

WE are glad to hear, from accounts forwarded to the Admiralty last week by Dr. Colan, R.N., the staff-surgeon in charge of Commodore Commerell, that that officer's health has undergone very considerable amelioration. The night-sweats have diminished, the purulent expectoration has almost entirely ceased, and the gallant officer has been able to go out in his galley. It may be hoped, therefore, that Commodore Commerell may shortly be able to return to this country, if not to active duty.

THE ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

AT the meeting of this Society on Tuesday night, Dr. John Harley read a short paper on the Use of Succus Conii in allaying various Disorderly Muscular Movements, and Mr. Joliffe Tufnell read a paper on Rest and Restricted Diet in the Treatment of Aneurism.

THE EPIDEMIOLOGICAL SOCIETY.

PAPERS were read at this Society by Drs. Waller Lewis and Gavin Milroy, on Plague, and on Quarantine with respect to Cholera. The former was a contribution from the pen of Dr. Tholozan, physician to the Shah of Persia, and the discussion of the latter was reserved until the next meeting, when Dr. Murray will read a paper on Cholera in India.

THE older members of the Naval Medical Service will hear with regret of the death of Mr. William Fossett, senior, for many years the chief clerk of the Naval Medical Department. He succeeded his brother, Mr. B. Fossett, and was again succeeded by his son, Mr. W. K. Fossett, who retired a year or two back, on the reconstruction of the department.

THE Works Committee of St. George's, Hanover-square, have adopted Dr. Schuloff's motion in favour of the employment of their solicitors in prosecuting tradesmen under the Adulteration Act. An amendment that the solicitors should press for payment of costs in all cases was negatived.

WE are glad to observe that the practice of giving morning representations of theatrical performances is now becoming very general. We have always considered the spectacle of young children at 11 o'clock at night in a theatre as unseemly in itself and fraught with danger to themselves; and now that the holiday and pantomime time is close at hand we would point out how much better it is in every way for parents to take their children to the morning performances, where, although the gas is lit, the theatre is much cooler than at night, thus avoiding the risks of cold and catarrh and their train of evils, always incurred when passing from a very hot building into the cold air without. If children are to witness plays and pantomimes, by all means let them be taken in the morning.

THE *Civilian* says that Dr. Lyon Playfair, the new Postmaster-General, will give his immediate attention to the postmen's grievances, the irregular detention of newspapers and book packets, the erection of a building for the Money Order Office and Savings Bank Department, the reduction of the telegram rate to sixpence for twenty words, the reduction of the fee for registering letters, and the abolition of the restrictions on the registration of newspapers. The return of Dr. Playfair for the Universities of Edinburgh and Aberdeen was gazetted on the 4th inst.

DR. J. P. PYE has been appointed professor of Materia Medica in Queen's College, Galway, in succession to Dr. M'Coy, whose lectures, from the opening of the College, reflected the greatest credit on its teaching. Dr. Pye's appointment gives the highest satisfaction. A Galway man, educated in the institution itself, and a graduate of much distinction at the Queen's University, where the examiners made a special report on the excellence of his answers, Dr. Pye's claims lightened the difficulty of selection even among a large body of well-qualified candidates.

THE mortality in some parts of the Punjaub has lately been enormously high. In Faridabad the death-rate reached 260 per 1000, while at Riwari it was 178 per 1000. The prevailing form of sickness and the principal cause of death is diarrhœa, in many cases resembling cholera. In consequence of the recent floods, many of the village wells had become grossly contaminated with the filth washed into them. Damaged grain was also eaten by the poor.

THE St. Andrews College Hall Company have received from the Council a highly favourable report. Of the students now in residence, some were preparing for the civil service, for which purpose the hall is peculiarly adapted. Greater publicity, said Principal Tulloch at the meeting, ought to be given to it, in order that its nature and advantages might be better understood and more widely appreciated.

A CORRESPONDENT of the *Standard* stated that small-pox had been unduly prevalent in Gloucester and its suburbs for the past six or eight months; the statement, however, was denied at a recent meeting of the Gloucester Town Council.

THE prevalence of enteric fever in Mile End and Limehouse has been reported to the sanitary authorities of those East-end districts. From an examination of the death-rate, however, there is no reason for alarm, or evidence of more typhoid than usually prevails at this period of the year.

DR. ACLAND, we are happy to state, has been unanimously re-elected to represent the University of Oxford in the General Medical Council.

THE Local Government Board is of opinion that the sewage difficulty at Brentford, Isleworth, &c., would be overcome if those places united in obtaining a general suburban plan by which the sewage would be discharged into the sea.

PROFESSOR MURIE has resigned the chair of Anatomy in the Edinburgh Veterinary College; and the trustees of the late Professor Dick, with whom the right of appointment lies, are taking steps to fill the vacancy.

THE Home Secretary has issued a circular condemnatory of the employment of policemen as inspectors of nuisances under the Public Health Act. Such duties must be discontinued by the officers from the 31st inst.

Correspondence.

"Audi alteram partem."

DR. BELL PETTIGREW ON VITALITY.

To the Editor of THE LANCET.

SIR,—I have read with equal surprise and regret two letters—the one by Dr. Beale, the other by Dr. Ross—which appeared under the above heading in THE LANCET of the 22nd and 29th November.

In the first letter Dr. Beale avers I have misrepresented him, and in the second Dr. Ross affirms I have misrepresented Huxley, Tyndall, and Haeckel.

As this is a subject concerning which there may be considerable diversity of opinion, I think it proper simply to restate the facts, in order that your readers may judge for themselves. In my lecture "On the Relations of Plants and Animals to Inorganic Matter and on the Interaction of the Vital and Physical Forces," published in THE LANCET of November 15th, I make the following statement:—"The vital forces transform matter, but do not destroy it. In like manner *they modify but do not destroy the physical forces with which that matter is indissolubly associated.*" The part of the statement to which Dr. Beale objects is that given in italics.

In his letter to THE LANCET (Nov. 22nd), Dr. Beale observes that some of my remarks would certainly lead my readers to conclude that in his (Dr. Beale's) opinion vital force really did destroy the forces which actuate ordinary non-living matter. Now, such, I reiterate, is my reading of the following passages from Dr. Beale's work, entitled "Life Theories and Religious Thought."

"Force (i.e., physical force) is actually opposed to construction, and before anything is built up, the tendencies of force must be overcome by *formative agency* or power..... The *vital power* transcends altogether physical forces." (*Op. cit.*, pp. 6, 78.) "The living *is altogether different from the non-living*, and the former in no way involves the existence of the latter." (*Op. cit.*, p. 77.) "The conviction has been pressed on my mind [Dr. Beale's] that vital phenomena must be referred to the influence of an agency *distinct from the physical forces of Nature*.....This overcomes, and in a moment, *all the ordinary attractions, affinities, and other properties of material molecules*, and in a manner with which there is nothing comparable in the non-living world." (*Op. cit.*, p. 82.) "We may therefore still regard life *as transcending mere matter and its forces.*" (*Op. cit.*, p. 39.) "Regarded from a merely physico-chemical or, as some would say, scientific standpoint, the production of every living thing is indeed *preternatural*, inasmuch as the process cannot be explained by any law of nature yet explained." (*Op. cit.*, p. 19.)

It may be that the above passages convey to my mind an impression different from that which Dr. Beale wishes them to convey, but from Dr. Beale's letter it appears that others beside myself have misinterpreted him, for he writes:—"I have been over and over again inferentially accused of believing and teaching absurdities, which have been neither believed nor taught by any person during the last fifty years." I hope it is not with Dr. Beale as with the famous Talleyrand, who regarded language, not as the exponent of thought, but as the medium or vehicle by which thought was to be concealed.

One of the points which I endeavoured to establish in my lecture was that *the vital forces work upon and through the physical forces* in building up a plant or animal, in the same way that they work upon and through inorganic matter. In this respect, as the foregoing quotations will show, I differ from Dr. Beale. My words are:—"Life, energy, and matter are equally distinct. Matter may be inert, or it may move under the influence of force, physical or vital. The physical and vital forces, however, are not to be confounded. An automaton is not an animal. While the vital and physical forces are independent, they are nevertheless correlated—i.e., the vital forces work in the same direction, and through the physical ones. A living organism builds itself up in accordance with natural laws, and avails itself equally of inorganic matter and physical force. The life supplies only part of the matter and force employed in building up an organism. The life, for example, appropriates and assimilates matter, but in doing this it does not necessarily interfere with capillarity, chemical affinity, gravitation, osmosis, or any of those influences or forces which regulate the distribution of matter in time and space. On the contrary, these are the instruments by which it makes itself known and felt. While living matter may and must be contra-distinguished from dead matter, there is no antagonism between them. What lives now dies hereafter, and the dead particles of a disorganised animal and plant may be, and frequently are, resuscitated. This arrangement equally adapts the organic world for the inorganic, and the converse. A living organism is incessantly taking in new and giving off old particles; it is a mysterious highway along which innumerable organic and inorganic atoms pass in the economy of an individual and in the natural order of events."

The next point to which Dr. Beale addresses himself is as to the *non-identity* of protoplasm and bioplasm; yet in the third edition of his work on "Protoplasm" (p. 188) he states: "The word *protoplasm* has by some writers been made to stand for *living matter* or *bioplasm* only. It is, I think, possible that, after some years have passed, *protoplasm* may be restricted to *living matter only*. The term will then become synonymous with bioplasm or living matter, in which case the latter words may be given up." In my lecture I characterise protoplasm and bioplasm as *elementary life-stuffs*, and in this connexion the following passage occurs:—"Analogous in many respects to the protoplasm of Huxley is the bioplasm of Beale." To this passage Dr. Beale takes exception; nevertheless in his letter he remarks, "Bioplasm is analogous *to certain forms* of protoplasm only." Surely this is not a contradiction of my statement, but a corroboration of it.

Dr. Beale adds that his bioplasm *is in no sense* identical with protoplasm; that protoplasm is by no means *always undifferentiated*, and that his bioplasm *cannot be otherwise*. I certainly state in my lecture that bioplasm, according to Beale, *is undifferentiated*, and in this sense identical with protoplasm as defined by Huxley. So far as the absence of differentiation is concerned, I think I am fairly entitled to make this statement.

To say that protoplasm is by no means always undifferentiated is a mere quibble, for this want of differentiation is the distinguishing feature of protoplasm in its ordinary acceptation.

Huxley, in his "Physical Basis of Life," when speaking of protoplasm, states "that there is some one kind of matter which is common to all living beings, and that their endless diversities are bound together by a physical as well as an ideal unity" (Lay Sermon, &c., p. 138). He adds (p. 134), that there is a single physical basis of life which pervades the whole living world, and that this basis, which is protoplasm, has a threefold unity—viz., a unity of power or faculty, a unity of form, and a unity of substantial composition. Now this threefold unity, if it means anything, means, I apprehend, as I stated in my lecture, absence of differentiation.

As regards the non-differentiation of protoplasm and bioplasm, it is to be remarked that this is a mere assertion. It does not follow that because ultimate chemical analysis and the microscope fail to reveal structure, that therefore pro-

toplasm and bioplasm are structureless. The fact that all the tissues are developed from protoplasm, bioplasm, or other analogous germinal life-stuff, is a strong presumptive proof that both are differentiated, and this is one of the points on which I insisted in my lecture. Indeed, Dr. Beale is aware of a certain degree of differentiation in his bioplasm; for if I remember rightly, he states that in well-fed bioplasm a nucleus appears. Several of his figures, moreover, (*vide* Bioplasm and Protoplasm) convey to my mind a distinct impression of differentiation. In like manner Huxley speaks of protoplasm as simple or *nucleated*.

Dr. Beale in his letter proceeds: "I do *not* affirm that bioplasm is a *product* of vital forces. Bioplasm is *not*, according to me, the *same always and everywhere*." If, however, as I have endeavoured to show from Dr. Beale's own writings, "force (i.e., physical force) is actually opposed to construction, and must be overcome by *formative agency*," then it follows that bioplasm is and can only be the product of *the vital forces*. If, furthermore, as Dr. Beale avers, bioplasm is absolutely structureless, what exception can be taken to the statement that *it is the same always and everywhere?* His words are: "Bioplasm or living matter is *always transparent, colourless, and*, as far as can be ascertained by examination with the highest powers, *perfectly structureless*, and it exhibits these same characters *in everything that lives* and *at every period of existence*." ("Protoplasm," 3rd edit., p. 199.) Dr. Beale would probably reply that bioplasm acts differently in different cases; but this, in my opinion, is rather to be regarded as a proof that his bioplasm is differentiated, although he fails to perceive the differentiation by the microscope, *unless in the case of well-fed bioplasm*.

Dr. Beale, as your readers are doubtless aware, divides animal bodies into *living* or forming, and *dead* or formed matter, the former being *structureless*, the latter *having a structure*. The living and dead matter, according to him, are separated by a sharp line, and can be detected microscopically both in health and disease. The *dead or formed matter* in adult animals and in man, in Dr. Beale's opinion, amounts *to more than four-fifths of the whole*. ("Protoplasm," 3rd edition, pp. 187, 198, 199.) I fail to perceive the sharp line which Dr. Beale seeks to establish between the *living* and *non-living*, and between the *structureless* and that *having a structure*. In either case it appears to me the one glides into the other, an opinion in part corroborated by Dr. Beale's own works. Thus, in Fig. 4, Plate vii. ("Protoplasm," 3rd edition, p. 224), the living matter is represented as passing into the non-living by a series of concentric rings, which indicate a gradual transition; and in Fig. 1, Plate v., of the same work, the living and dead matter (if the colour which is produced by artificial staining be eliminated) are delineated as structurally resembling each other. In fact, the living is the more differentiated of the two, from its possessing in some cases a nucleus and in others nucleoli. I especially dissent from Dr. Beale's doctrine, that a living adult animal *is more than four-fifths dead*. What power, one might reasonably inquire, would the living fifth have to drag about the dead four-fifths? Fancy a man, when he takes a walk, carrying four other men, equally heavy with himself, on his back!

Dr. Beale's final assertion runs as follows: "I do not claim for bioplasm similar properties to those claimed by Huxley for his protoplasm." I presume I am correct in stating that the bioplasm of Beale and the protoplasm of Huxley are germinal or elementary life-stuffs uniformly diffused in plants and animals, and that from these elementary life-stuffs, according to Beale and Huxley, all the tissues of plants and animals proceed. If so, then it appears to me that Beale does in reality claim for his bioplasm what Huxley claims for his protoplasm.

So much for Dr. Beale's letter. Permit me, in conclusion, to refer very briefly to that of Dr. Ross.

Dr. Ross voluntarily constitutes himself the champion of Huxley, Tyndall, and Haeckel. From his mode of procedure I gravely doubt whether those gentlemen would have commissioned him to undertake their defence if they had been apprised of his intention. Dr. Ross states that the *unity* for which Huxley contends is converted in my hands into *identity*; and that the unity of Huxley *is perfectly compatible with an infinite number of special modifications*. Now if, as Huxley states in his "Physical Basis of Life," protoplasm is characterised by a threefold unity—namely, a unity of power or faculty, a unity of form, and a unity of substantial composition—then I maintain, notwithstanding Dr. Ross's assertion to the contrary, that there is a oneness or, what is the same thing, *identity* in protoplasm. If, on the other hand, protoplasm admits, as Dr. Ross states, of an indefinite number of special modifications, either as regards its substance, form, or faculty, then I humbly submit that *the unity of protoplasm is destroyed*; modification in this sense being neither more nor less than differentiation. In reality, and as stated in my lecture, there are good grounds for believing that both protoplasm and bioplasm *are differentiated*.

Dr. Ross's analogy regarding the unity of science and the identity of chemistry, physics, and biology, is simply unintelligible. Dr. Ross, with a lenience which I do not crave at his hands, attributes my misrepresentation of Professor Huxley's views to my receiving my impressions, not from Huxley's own writings, but from those writings as epitomised by Dr. Hutchison Stirling. I beg to state that I am perfectly familiar with Professor Huxley's "Physical Basis of Life," and that I adopted Dr. Stirling's epitome of Huxley's "Lay Sermon" in my lecture simply because the exposition there given is remarkable at once for its lucidity and its brevity. I desire, moreover, to state in this connexion that I entirely agree with Dr. Stirling in his estimate of protoplasm as set forth in his exhaustive work on that subject. Dr. Stirling has published a very able and in every sense satisfactory reply to Professor Huxley's essay "On Yeast"—a circumstance which precludes my saying more on this point.

Dr. Ross informs us that he has been reading Haeckel's "Generelle Morphologie," that Haeckel contends for *the unity of God in nature*, and that I have placed Haeckel's philosophy in a false light. Now, I wish to inform Dr. Ross that, whatever Haeckel contends for in his "Generelle Morphologie," in his "Natürliche Schöpfungsgeschichte" the following passage occurs, and that the passage in question not only separates God from his works, but virtually denies the existence of God altogether. The passage freely translated, and as given in my lecture, runs as follows:—"The homogeneous, viscid, plasma substance, which singly and alone formed the bodies of the first organisms, and even at this day quite alone forms them in the case of the *moneres*, or simplest amœbic forms, is analogous to the tenacious and viscid planetary substance which contains the elements and substance of the young earth, as well as of the other glowing world bodies..... In both cases *the form of the creation happened, not through the capricious* [literally fidgety] *interference of a personal Creator, but through the original power of matter fashioning itself*. Attraction and repulsion, centripetal force and centrifugal force, condensation and rarefaction of the material particles, are the only creative powers, which at this point lay the foundations of the complicated structure of creation."

Closely analogous if not identical with the foregoing is the annexed passage from Tyndall. In the region beyond the microscope limit, observes Tyndall, "the poles of the atoms are arranged, that tendency is given to their powers, so that when these poles and powers have free action, and proper stimulus in a suitable environment, they determine first the germ, and afterwards the complete organism." ("Use and Limit of the Imagination in Science," p. 40.)

I trust, Sir, that Drs. Beale and Ross will consider themselves sufficiently answered in what I now write, as want of time will prevent my saying anything more on the subject.

I am, Sir, yours very truly,

J. BELL PETTIGREW.

Royal College of Surgeons of Edinburgh, Dec. 4th, 1873.

THE "VICTOR EMANUEL."

To the Editor of THE LANCET.

SIR,—Will you allow me to make a few comments on your very admirable Report on the above vessel?

While I cordially acknowledge the correctness of your Commissioner's criticism, I venture to think that if he will be good enough to regard the arrangements by the light of some information, of which he could not have been aware when he wrote the Report, he will perceive that the defects he has indicated are more apparent than real.

And, first, let me correct a trivial inaccuracy in regard to the sick-cots. Those for surgical cases were used in the Abyssinian war. They have *movable* and not "fixed" sides, and are furnished with a trap-door. These cots have been distributed on the hospital deck in such a way that no two of them are contiguous, and they are placed in the position best adapted for ventilation. I venture to think that nothing would be saved if one of the lifts communicating with the hospital deck were utilised for the transfer of the patients' diets from the hospital galley, even in fair weather, for it would be out of the question in rough. The main hatchway to the hospital deck being much closer to the galley than any lift, more labour would be entailed in carrying the diets to the lift than in conveying them direct to the hospital deck. Your Commissioner is, in my opinion, quite correct in thinking this deck somewhat overcrowded; but, as every iron cot has been fitted not only to rock and lock but to be removable at will, there is no reason why the spare ones should not be taken down and stowed away; and under these circumstances it was deemed best to provide fittings for a maximum number.

Again, as regards the provision of a curtain "athwartships," and the numerous canvas screens. The former will be down only under exceptional circumstances, and for the short period of time that the sick officers might desire to secure privacy. This was, moreover, if I remember aright, one of the requirements made by medical officers who had served on board other hospital ships. No doubt a clean sweep of deck fore and aft is most essential, and such will be the case when the canvas screens are rolled up, as they are ordinarily intended to be; and they have purposely been deeply scalloped at the top and left free of the deck at the bottom, so as, when down, to intercept the current of air as little as possible. But the chief explanation of the presence of these screens and of the American stoves is this:—At the end of the campaign the ship will have to convey the sick to this country. Patients recovering from tropical fevers and dysentery are, as you know, very susceptible of the effects of cold, and they may have to encounter the danger and discomfort of a voyage home at the most inclement season of the year. With the number and variety of natural and artificial sources of ventilation in this ship, it was felt that there should be some means for protecting the sick against the effects of a colder latitude. With thermometers to indicate the temperature, and doctors to direct at what degree it should be maintained, I do not think the sick attendants can go very far wrong.

My reasons for asking to have the whole of the hospital deck painted white were—that there is nothing like a white surface for showing dirt; that paint renders the wood non-absorbent; that any part of the deck can be washed with soap and hot water; that white paint is common, cheap, and readily renewed; and that for a hot climate it is the coolest colour that can be selected. With the jalousies specially provided to exclude the sun's rays, without impeding the ingress of air, it is to be hoped that no one will be inconvenienced by the "glare."

Your Commissioner cannot be more averse than I am to the use of night-stools on the convalescent deck, and they are only intended to be used under exceptional circumstances. Convalescents from dysentery, however, cannot always "hold on"; and as watercloseets, in my opinion, would have been most objectionable on this deck, night-stools had to be furnished; but they are intended as *night*-, and not day-stools. And as the article supplied is not my invention, I may be allowed to call attention to its merits. It is a portable watercloset, with a well for a disinfecting liquid, a pump, and a means (fish-tail) for discharging this liquid on the excreta as the pan is depressed. The receptacle is of metal, and fitted so as to be sealed when covered. With the efficient medical staff on board and an abundance of well-trained subordinates, it is believed that the objections to these hospital utensils may be overcome, or, at any rate, reduced to a minimum.

Generally speaking, the extent to which the ventilation has been placed under control has been advisedly adopted, in consequence of the confidence with which it was felt that this might be left to the discretion of the medical officers on board.

May I venture to hope that you will issue your Report in the form of a pamphlet? The foregoing remarks are put forward simply on public grounds; for, personally, I have every reason to be gratified with the results of your criticisms and verdict. It only remains for me to thank you for the painstaking and able way in which your Commissioner has executed his task, and to state that nothing could have exceeded the zeal and earnestness with which everyone, from the highest to the lowest, has striven to carry out the wishes of the Medical Service.

Yours truly,

Dec. 6th, 1873. JEFFERY A. MARSTON.

P.S. Since writing the above I have perused your leader, and hasten, in justice to others, to add that the Medical Service had to indicate what it required; that the plans and designs were forwarded from the Dockyard authorities to the Director of Transports; that we went over them separately and together; and that without the benefit of Sir William Mends's experience, judgment, and advice, and the ability, as well as the skill and energy, of the Dockyard authorities, this hospital ship would never have been what you declare her to be. It would be excessively difficult to apportion the credit that belongs respectively to the individuals who were concerned in the preparation of the vessel, and I should extremely regret if an undue amount of it were accorded to me.—J. A. M.

IS NITROUS OXIDE A SAFE ANÆSTHETIC?

To the Editor of THE LANCET.

SIR,—In the February number of your valuable journal, an article appears under the heading of "A Case of Fatal Suffocation from Nitrous Oxide Gas," which, in my opinion, contains so many errors regarding the operation and effects of the gas that I ask space for this reply.

In regard to the death of Miss Wyndham, which you so circumstantially describe, the question is whether she died from the effects of the gas, or from the unfortunate treatment she received after having fainted, and after the effects of the gas had passed off. You state: "She took the gas in the usual way, without any symptoms to excite uneasiness. At the proper degree of insensibility the inhalation was stopped, and the tooth was extracted. In the operation Mr. Mason was obliged to split the fangs and take them out separately. It was not until after the operation was completed that anything unusual happened, but immediately afterwards the face became livid.....Mr. Mason hastened to fetch Dr. Drake, who returned with him, and who found the lady still alive. She was sitting in a chair in a half reclined position, before an open window."

It will be observed that she fainted "after the operation was completed." She certainly could not have fainted while under the influence of the gas, because, from the extra supply of oxygen in the gas, the action of the heart and the circulation of the blood is increased rather than arrested. Indeed, the gas is the quickest and surist remedy to administer in cases of fainting. If this lady had been placed at once flat upon the floor, and some water dashed in her face, in all probability she would have revived. There are many cases on record where patients have died in the dentist's chair when no anæsthetic was administered. Why assume that this death was caused by the gas, when nothing unusual happened till after the effects of the gas had passed off?

The great mistake of THE LANCET is contained in the following extracts:—"From no agent have there been so many hairbreadth escapes from death as from this gas, and probably of late some persons every day have been brought within the minutest line of the danger to which Miss Wyndham succumbed. ..... Nitrous oxide, indeed, is not an anæsthetic at all. A true anæsthetic is an agent which suspends common sensibility without, by any necessity, interfering with those organic processes on the continuance of which life depends. Nitrous oxide acts, not in this way, but by suspending for a brief period one of the most important of the organic processes—that of respiration itself."

In reply to the first extract, I have to say that it is a mere assertion without any proof. THE LANCET admits that this is the *only* death which has occurred in England from the effects of the gas, and I think I have shown that even this case cannot with certainty be attributed to the gas. The

gas has been administered many years, and by hundreds of dentists in England. How can it, then, be assumed that "some persons every day have been brought within the minutest line" of death? Practical experience is better than theory in such a matter.

In regard to the second extract, in which it is stated that nitrous oxide is not an anæsthetic, and that it suspends respiration, I have to answer, THE LANCET *never made a greater mistake*. I speak from an experience of over ten years in administering the gas, and to over 67,000 patients. I have given the gas for something over a hundred operations in general surgery, in which I have kept patients in the anæsthetic sleep from five to sixteen consecutive minutes; and I have the testimony of the distinguished surgeon, Dr. J. Marion Sims, that he has performed operations with the gas where the insensibility was continued over one hour. According to the reasoning of THE LANCET, respiration (breathing) was suspended during all this time! No one can question the fact that the gas will produce insensibility to pain.

And now as to the safety of the gas as an anæsthetic. I presume it is known that I introduced the gas (or rather revived it) to the dental profession in July, 1863. After using it for about nine months, I commenced to ask my patients to write their names on a scroll. These names I have numbered regularly from the beginning. The number on the scroll at this writing is *sixty-seven thousand four hundred and fifty-five* (67,455). In all this vast number I have never had a fatal case, or even a case of serious injury, from the effects of the gas. We have an occasional case of vomiting—not oftener than one in a hundred,—and this, usually, from swallowing a little blood. During the past eight years we have averaged from twenty to thirty patients every day, and occasionally reaching fifty. In the spring of 1868 I exhibited to a large number of leading dentists and surgeons in London, at the office of Mr. Charles James Fox, the autograph signatures of *over nineteen thousand of the above patients*.

What do these facts prove? Not that "the administration of nitrous oxide is a harmless process—a process which any man, educated or uneducated, may carry out without danger of destroying life." No one pretends this. But it shows that, with ordinary care and prudence, it is a comparatively safe agent, even in the hands of ordinary dentists. There are many thousands of dentists in the United States who have used the gas during the past eight or nine years, so that it is safe to assume that three hundred thousand have inhaled it in this country for teeth extraction, and yet *not a death has occurred!* (There was a *reported* death from the effects of the gas in this city, but on investigation it was shown that the patient only *attempted* to breathe the gas three or four times, and finally concluded to have her eight teeth drawn *without* it, which was done. She fainted from the pain and shock, and unfortunately, like Miss Wyndham, was kept in an upright position for some ten minutes. In referring to this case, THE LANCET admitted the "ineffectual" attempts to administer the gas, and stated that the patient would probably have recovered if she had been laid flat upon the floor. In my opinion, if this woman had inhaled the gas properly she would have been alive to-day.)

To use any anæsthetic successfully requires experience. It does not of necessity require great knowledge in chemistry or surgery. If any of your learned readers were to stand by my chair and see me administer the gas successfully to a hundred patients, though I profess to no great scientific knowledge, he would prefer to trust himself in my hands in a similar operation upon himself, rather than upon the theoretical knowledge of any physician or surgeon, however distinguished.

The difference in the action of nitrous oxide and chloroform is, that chloroform, containing no oxygen, arrests or retards the action of the heart, and really carries the patient *towards* the point of death; and about one in 2500 die from it. Nitrous oxide, containing more oxygen than the atmospheric air, increases the action of the heart, and carries the patient into increased and higher life. One gives life, the other death. At least half a million of people (the world over) have taken the gas for teeth extraction, and not a death has occurred, or only one, according to THE LANCET. It appears to me that if experiments are to be made with a view to "learn" how to use anæsthetics, they should be made with that agent which has proved to be the most safe. In view of all the above facts, no one can question that nitrous oxide, in point of safety, is vastly superior to all known anæsthetics. Dentists who commence the use of the gas often make the mistake of not administering enough, or of having too small a passage for the patient to breathe through; but these are errors which time and experience will correct.

I am, Sir, your obedient servant,

New York, Aug. 18th, 1873. G. Q. COLTON.

P.S.—THE LANCET states that the pulse of the patient became rapid when under the influence of the gas, as though this was an unfavourable symptom. The rapidity of the pulse (in health) depends upon the rapidity with which it is oxygenised in the lungs. When we run upstairs, or engage in any sudden muscular exertion, we breathe faster, and supply oxygen to the lungs faster, thus preparing it more rapidly for circulation. There is a corresponding increase in the rapidity of the pulse. The nitrous oxide, being composed of one-half oxygen, supplies this oxygen to the lungs so rapidly that the pulse is increased by fifteen to twenty beats in a minute when it is given for anæsthesia. If the operation is attended with great mental excitement, the pulse may be increased thirty or forty beats, not certainly reaching a point of danger.

A person can "hold the breath" for a considerable time after inhaling the gas, because an extra quantity of oxygen is suddenly supplied to the lungs. The blood continues to flow till this extra oxygen is used up. The pearl-divers take a dozen or twenty rapid and deep inhalations of common air and then go under water and remain a long time, until the extra oxygen supplied to the lungs is exhausted. By this rapid and deep inhalation of common air a person can make the head swim, or put himself into a half-anæsthetic condition. The gas does the same thing, only carrying the effect a little farther.

*** Our correspondent, by the very candour which he exhibits, prevents us from replying to him as we might have been tempted to reply. He takes credit only for what he calls practical knowledge, and professes "no great scientific knowledge." This is to be regretted, because he offers observations purporting to be scientific—that is to say, to be based on scientific fact or observation. We, on our part, have a practical knowledge of anæsthesia as extended as it can be, inasmuch as it extends from the first days of the introduction of the art to the present day without a break in our labour of any serious duration. But we have striven also to get at principles; we have experimented to learn; and we thereupon come to a difference with Dr. Colton on vital points. We assert, on facts gained both by experience and experiment, that the lady who died at Exeter from nitrous oxide did not die of syncope, that she showed no symptoms of syncope, but that she died of asphyxia. We assert, on like evidence, that nitrous oxide is not decomposed in the human body, and that there is no proof whatever that the oxygen it contains is applied for oxidation in the organism. We suggest, on good evidence, that the rapid pulse which follows the administration of the gas is due, not to stimulation of the heart, but to the resistance which is taken off the heart from an induced paralysis of the vessels of the minute circulation; and we affirm that a man or an animal can live longer with the lungs filled with common air than with the same organs filled with nitrous oxide. In a word, Dr. Colton's experiences of administration, which we do not dispute, show that asphyxia can be carried to the point of inducing insensibility with fewer accidents than might be supposed. The experiments in the Grotto del Cane prove the same fact; and we remember that, some years ago, when, on an inquiry into the management of one of our great English institutions for the insane, it was shown that for years upon years certain troublesome patients had been systematically quieted, before their washing and dressing, by the process of compressing their windpipes by a few twists of a soft stocking, it was contended

that the process never did any harm. These facts, in their bearing on asphyxia, are most valuable, as are also some others which illustrate that a living body may be submerged in water several minutes, and may yet recover after removal; but they have nothing directly to do with anæsthesia as a scientific study. Perfect anæsthesia is, in principle, the art of suspending sensation and sensibility without interfering with those processes on which the continuance of life depends. The administration of a gas which stops the process of respiration, though it suspends sensation and sensibility, for a short period prior to death, is no part of this perfected art; and we shall persist, notwithstanding Dr. Colton's practical knowledge, in upholding the principle of scientific investigation until the art is perfected.—ED. L.

HEALTH OF NAPLES.

To the Editor of THE LANCET.

SIR,—When THE LANCET publishes as a fact that Naples is panic-stricken on account of the ravages of cholera, it is time to lay before the profession a few statistics which may enable them to form a judgment as to the severity of the epidemic. We will assume that the population of the city is half a million (in point of fact it is over). Between the 22nd August, 1873, and the 15th November, 1873, the number of deaths registered was 4176, and during the same period (eighty-five days) in 1872, 3191, showing an increased mortality during the prevalence of cholera of 985. But of the 4176 deaths only 898 were due to cholera. Naples is *not* panic-stricken, and, as far as I can see, everything goes on as usual. *The Times'* correspondent, lately, in an article on the health of Rome, quotes certain statistics as to the number of deaths of English at Naples from October, 1872, to June, 1873. These statistics profess to be drawn from official sources. I do not see any allusion among the causes of death to gunshot wounds, nor to cutting and piercing wounds, and yet I have seen the bodies of three English subjects whose deaths were due to one or other of those classes of injuries. I have practised in Naples for three years, during the whole of which time I have lived in the Riviera di Chiaja, excepting a summer holiday at Sorrento, in Switzerland, and at Castellamare. With the exception of two of my children and another member of my family having had smart attacks of remittent fever, owing to imprudent exposure to the sun, followed by a chill from not being sufficiently provided with warm wraps, and over-fatigue, and some attacks of an old enemy—rheumatism,—I may say that we have been perfectly healthy. Among *bonâ fide* English residents in the last few years there have been very few cases of typhoid. I have known several cases of remittent contracted in Naples or its immediate vicinity, but since the drainage of the Lago d'Agnano there is a marked improvement in this respect. I cannot see any good in attempting to show by figures that Rome, or any other city, is the healthiest in the world. The chief point to be looked at is the cause of illness amongst visitors. This is not difficult to discover. People now-a-days travel excessively, if I may be allowed the expression. They do their galleries, and churches, ruins, &c., very conscientiously, but at too great a pace. Then follow a long and fatiguing railway journey, irregular meals, and a repetition of the hard labour of sightseeing. Your readers can very easily imagine the effect of all this on, for example, a hard-working professional man, who wishes to make the most of his holiday, and see everything that there is of interest in the very least possible time. When nature at last rebels, and Nemesis, in the shape of a fever, seizes upon him, he does not for one moment imagine he is to blame, but immediately condemns the city in which he happens to be taken ill. Now Naples is generally the last visited of Italian cities, and so we get cases here of illness for which we get the credit. In point of fact, we could say that the disease was contracted elsewhere, but I think it fairer to attribute it to the imprudence of the patient. Long-continued fatigue, and unaccustomed exertion and excitement, irregular meals, and possibly unsuitable diet, must tell upon the nervous organisation, and open the door to disease. In the present epidemic it is worthy of remark that children and old people have suffered. It may be said that the lower orders only have suffered. They live on almost nothing, and have no power of resistance. In addition, their exceedingly nervous temperament has a great influence in any epidemic. As they believe that the Government employ doctors to poison them, and have besides no confidence in their medical men, they either refuse or do not seek relief. Much has been done in the matter of disinfecting, and much still remains to be done. Had Naples only a free supply of good water there would be a very marked change in the death-rate. Everyone is agreed on this point, but I am told that for eleven years every municipality has thrown obstacles in the way of procuring it. If the correspondents of the English papers were to take this matter seriously in hand some good might be done. It is very useless to say one week that the Municipality are negotiating with Messrs. A.B. and C., and that there is every prospect of obtaining at length a supply of excellent water, and then a week or two afterwards regret to have to say that the prospect is as far off as ever, and that until Naples has its water-supply increased disease must prevail. I hope before long to be able to hand you statistics as to the causes of death in Naples, and in the meantime shall only say that in 1000 deaths 444·22 were children under five years. The sanitary bulletins show a decrease in the cholera, and the Syndic has ordered that municipal schools are to be reopened.

Readers of foreign newspapers should understand that an immense amount of political or religious feeling, and possibly of personal spite, is at the bottom of what they do not see a reason for; and also that an Italian adjective of the superlative degree is used to express what we might numerically express as one-fourth of a positive. Naples is by no means so black as it is painted, and those who, travelling easily, come here and live with common prudence, adopting a few simple precautions—such as non-exposure to the sun, especially when walking,—will find it an enjoyable and, if not a perfectly healthy residence, at least no worse in that respect than Rome, Florence, or many other cities or health-resorts where it is the fashion to cry down Naples.

Although sensation novel-writers send us all their scoundrels, I do not think it fair for professional journals to make us out worse than we are; and I therefore trust that you will allow space in your columns for this somewhat discursive apology for this beautiful city.

I am, Sir, yours faithfully,

Naples, Nov. 29th, 1873. J. A. MENZIES, M.D. Edin.

CAULIFLOWER EXCRESCENCE OF THE OS UTERI.

To the Editor of THE LANCET.

SIR,—In your last report of the meeting of the Medico-Chirurgical Society, I find a report of a paper on this disease by Dr. Snow Beck, in which he states that some cases I had reported in Guy's Hospital Reports were nothing but encephaloid disease. Of course it is merely a question of names. If Dr. Snow Beck prefers to limit the term "cauliflower" to simple villous disease, then what are we to call the more cancroid forms which have a greater resemblance to a cauliflower than the simple villous disease? For myself I prefer to call the disease which is most like a cauliflower by that name. I do so because there is no hard and fast line between one and the other of the varieties. No one who has studied cancroids can so limit them. And this I have specially pointed out in the paper referred to. The growths were exactly like a "cauliflower," much more than to "brain." Hence I call them "cauliflower," and not "encephaloma." As I pointed out in my paper, there are various grades between simple villous disease and the least marked cauliflower disease, dependent on the relative intensity of the malignant force and on the elementary tissue most affected by it.

I am, Sir, yours, &c.,

J. BRAXTON HICKS, M.D., F.R.S.

George-street, Hanover-square, W., December 9th, 1873.

A STRANGE STORY.

To the Editor of THE LANCET.

SIR,—The theory of "Common Sense" is altogether untenable. Whatever the explanation, it must lie far deeper than the surface. I find the "Strange Story" was duly chronicled many years ago by the late Mr. J. W. Eastment, of Wincanton, a medical practitioner of high character, who was born in the village where "Dumb Eli" lived, and whose evidence will satisfactorily dispose of your correspondent's suggestions. After stating the facts I have already communicated, Mr. Eastment says:—"The afflicted parent would often entreat him to converse with him; but neither entreaties, threats, nor promises were of the least avail. He even promised him the half of what he possessed would he but speak to him; but it was all to no purpose. The mother also often admonished and desired him to oblige his father by talking to him; but his reply was, 'No, mother, do you not think I would talk to father if I could? Whenever father approaches, my voice begins to falter, and before he comes within hearing the power of speaking entirely fails me.'" This evidence is inconsistent with the theory of maternal vindictiveness. The facts of the case are indeed unexplainable by "common sense." My appeal was to the more than ordinary acquaintance with psychological and physiological phenomena, which may be looked for among the readers of the leading medical journal.

I am, Sir, your obedient servant,

Glastonbury, Dec. 8th, 1873. T. MAYHEW.

FOREIGN MEDICAL INTELLIGENCE.

HYGIENIC ASPECTS OF REST ON SUNDAYS.

THE Swiss Society for the Observance of the Sabbath has, with the object of better extending the success of its undertaking, proposed a subject for public competition, in which the hygienic aspects of rest on Sundays will be examined as concerns the public at large, and especially the working classes. A prize of £48 will be given to the writer of the best essay on the question. The three following headings are indicated as the main points of the essays which will be contributed:—1. Favourable effects of rest on the Sunday on individuals of various times of age, and its influence on the family and the nation. 2. Diseases which continuous labour brings on or increases amongst those who, through their occupations, are deprived of a weekly day's rest; such, for instance, as workmen belonging to confining trades, those employed in certain workshops or manufactories, on railway lines, in post-office or telegraphic stations, &c. 3. The practical applications which proceed from the investigation of the foregoing facts and observations. The memoirs must be written in French or German, or be accompanied by a translation in either of these two languages, and be sent in before September 30th, 1874, to the President of the Society, Place de Champel, 497, Tranchées de Plainpalais, Geneva. The jury is composed of the following medical men:—Drs. Bourgeois, of Berne, (President); Bonnard, of Lausanne; Dunant, of Geneva; Cornaz, of Neufchâtel; Professor Ernst, of Zurich; Dr. Faverger, of Neufchâtel; Dr. Hiegler, of Basle; Professor Kœcher, of Berne; Drs. Lombard and Sencor, of Geneva; P. de Laharpe, of Lausanne; and De Mandach, of Schaffhausen.

EXTENSION OF THE INTERNATIONAL CONVENTION OF GENEVA TO SEA WARFARE.

M. Fergusson, formerly Minister of the Dutch Naval Department, has just published a work, in which he proposes to extend to maritime warfare the institution of the Genevese Convention for help to the wounded. Amongst the various means which M. Fergusson suggests for the carrying out of this scheme may be mentioned the establishment of (1) a hospital ship; (2) safety boats; (3) a small crew; (4) a hospital ship in the larger ports. The hospital ship which would accompany the fleet would be painted white, with red crosses, and would take up the wounded of both friends and enemies. During the fight the saving crew, clothed in white and decorated with the Geneva cross, would man the safety boats, and place the safety buoys at a distance. The men would be employed exclusively for this service. The author anticipates many objections; amongst others, that the ambulance department might get mixed up with the fighting ships during the combat, and that some of the men might get killed or wounded. "But what would this be," he exclaims, "compared with the hundreds of lives which they would save?" He suggests that in time of peace the hospital-ships might be useful among the fleet in case of an epidemic.

MILITARY EDUCATION IN THE FRENCH COLLEGES.

At a meeting held on Saturday last at the Ministry of Public Education of France, and at which the most important of the French university professors were present, together with two head officers belonging to the corps of military engineers, it was decided that all the scholars in the Lycées should be successively made to study the building of field fortifications. The various municipalities of the province will have to provide large grounds whereupon the young scholars will be exercised in building up bastions, half-moons, parallels, loopholes, trenches, batteries, cavaliers, &c. The lesson of the influence of gymnastics in making a sturdy, active generation of men, as given by the Germans during the recent war, has not been lost on the French. Already all the students of the Lyceum are made to practise with the chassepôt and to go through the training of military drill. The measure which has recently been taken will have the effect of developing the present system of military gymnastics in the French schools, and of preparing the military education which every Frenchman has now to go through.

THE CHOLERA IN VIENNA.

The *Wiener Medizinische Wochenschrift* states that the choleraic epidemic which during the last six months had been prevalent in Vienna may now be considered at an end. "The isolated cases of choleriform character, of which there was only one instance last week, do not present an epidemic form, and have," continues the *Wochenschrift*, "been often observed here, especially during the summer of 1871 and 1872, without giving birth to a real epidemic. In the provinces the epidemic has also disappeared everywhere, except on one point of the district of Gross Enzersdorf. Last week four cases broke out there, and three terminated fatally. The cause of this slight recurrence is not known. The sanitary condition of Vienna is excellent, and but for the cases of phthisis which at present fill the wards of our hospitals and the bills of mortality, the number of cases of disease and death, both in town and in the hospitals, would be exceptionally slight."

MEDICAL STATISTICS OF RUSSIA.

According to the statistics published by a medical contemporary of Kiew, there exists but one medical man in Russia for 14,116 inhabitants, whilst the proportion in Prussia is one to 3230, in Austria one to 4355, and in Hungary one to 5492. The total number of medical students in Russia is stated to be 1922, whilst in Germany it amounted to 3978 during the half-yearly term of last winter. The same journal mentions that thirty of the Russian women who were attending the medical lectures at the University of Zurich, and were expelled on the demand of the Russian Government, have obtained permission from the French Government to continue their studies at the School of Paris.

RATIONAL MEDICINE IN ITALY.

The Italian journals relate that a vice-professor of the Faculty of Medicine of Naples, having asked permission of the Faculty to open a course of homœopathy, received the following answer:—"The Faculty could not grant the authorisation, seeing that rational medicine, which is taught on the basis of natural sciences, excludes allopathy as well as homœopathy, and, indeed, all absolute systems of medicine." This is the first time, observes *Il Morgagni*, that an Italian Faculty has officially declared itself the representative of a rational medicine based on the objective study of nature, and has withdrawn itself from the two systems now in vogue.

DEATH OF CONTINENTAL MEDICAL MEN.

We have to record the recent death of the following Continental medical men:—M. Meulewater, Professor of Anatomy at Ghent, Knight of the Order of Leopold, at the age of

seventy-two; Dr. Wendling, of Strasburg, whose extraordinary success as a student at the University of Strasburg had given promise of a most brilliant career; Dr. Sabin Papillon, of Belfort, chief surgeon of the French army, and the author of several remarkable publications on the questions of military hygiene; Dr. Audhoin, one of the unfortunate victims of the recent disaster of the *Ville du Havre*; Dr. Molas, of Auch, President of the Medical Association of Gers, at the age of eighty-two; and Dr. Victor Uytterhoeven, member of the Superior Council of Public Hygiene, at the age of seventy-two.

A NEW MEDICAL SENATOR IN ITALY.

Amongst the twenty senators recently appointed by Victor Emanuel, we are glad to notice the name of Dr. Terenzio Mamiani, who had shortly before presided over the Scientific Congress held in Italy.

SMALL-POX IN SPAIN.

Small-pox is at present very prevalent in Spain. The epidemic is especially very active in the province of Toledo, where it has already carried off a great number of victims.

IRELAND.

(From our own Correspondent.)

VERY little of medical interest has taken place in Ireland during the last month, beyond the fact that boards of guardians are increasing the salaries of their medical officers throughout the country, and not now by individuals, as formerly, but throughout whole unions. This, to a great extent, may be attributed to the working of the Irish Poor-law Medical Officers' Association. If these gentlemen only cohere they must of necessity greatly improve their position. In Dublin the medical schools now are all in full working order, and the medical societies have been opened for the session. The Dublin Sanitary Association still continues to exhort the Health Committee of the Corporation every week, whilst the latter still indulges in circumlocution and obstruction.

The report of the Registrar-General tells us that last week our death-rate was 25 per 1000, but we do not believe one word of it. He knows as well as we do ourselves, that the death-rate of Dublin is considerably over 30 per 1000, and that over 25 per cent. of our deaths are not registered. Else how does it happen that the reports of the cemeteries show an excess of burials over the Registrar-General's report of deaths?

Sanitation, unlike taxation, is destitute of any immediate tangible element. To this we must probably attribute in great measure the apathy of our corporation. They have, however, proposed that we should be taxed an additional halfpenny in the pound, to enable them to bury their dead. We are at present told that this will be taken out of the sewer-rate. Our experience, however, is that taxes of all sorts inevitably in the end are taken from the pocket; and if, to use the phraseology of the turf, we might predict "a moral," we should say that if this tax be taken out of the sewers of Dublin it will simply be taken out of both pockets of the inhabitants.

Since Dr. Lyons delivered his address in the Catholic University on denominational medical education, we have not heard further on the subject. A Sunday was set apart for collections for the university, and sermons were preached throughout Ireland for that purpose, but they do not appear to have been accompanied by much pecuniary success. Indeed, as the bulk of the Roman Catholics are of the lower classes, it appears to be unreasonable that they should be expected to contribute towards the education of the upper classes. They are obliged to pay a compulsory tax for the education of their own children, and it is most unlikely that they would impose a voluntary tax upon themselves in order to educate the sons of their landlords, &c. It will be found that, although the Irish peasant may not know exactly what Home Rule means, and perhaps cares less, he will be quite at home in an elementary question of arithmetic such as this.

With regard to denominational medical education, it has been tried and has failed in Ireland. We have in Dublin hospitals of every shade of Protestantism and Roman Catholicity—at least, so they assert themselves to be; but their success as hospitals, either for patients or students, has been in an inverse ratio to their religious intensity. We have had a Catholic school of medicine for at least twenty years, but it never was well attended. Whatever denominational instruction may be required amongst the other learned professions, it is not wanting in physic. If it is expected that by the introduction of denominationally-educated medical men gratuitous practice of medicine will be extended in Ireland, it is greatly to be feared that the inhabitants will be sick indeed, and their medical attendants poor indeed. At present one-sixth of the inhabitants are attended gratuitously. A gratuitous sick-rate of this magnitude in an agricultural country does not leave much margin for a paying practice for the aspiring practitioner. In fact, we may talk about denominational medical education as we will, but in Ireland every person may obtain gratuitous medical relief if he wishes. Those who can afford to pay for advice, and choose to do so, rarely consider the religion of their medical man, his fashion more than his religion being the question. Amongst those who cannot afford to pay for, or do not choose to pay for, medical advice, they will be doctored according to the prominent denomination of the board of guardians within whose jurisdiction it is their lot to be located. And whether the doctor be the best of that denomination or not depends entirely upon whether his name be Brown, Jones, or Robinson. As to Dublin, we cannot complain of medical destitution, at least we avail ourselves of gratuitous medical relief to the uttermost. The inhabitants number about 300,000; over 70,000 attend the Poor-law dispensaries annually. We have ten hospitals, which, in their annual reports, claim to have treated close upon 200,000 cases of disease. We have other hospitals and dispensaries, too, which are all doing much business. We are not all ill as yet, thank goodness; but if something like 250,000 out of 300,000 of us are gratuitously doctored annually, it is clear that, if denominational medical education is calculated to expand the gratuitous practice of medicine, we may as well cave in at once.

Dublin, December 3rd, 1873.

PARIS.

(From our own Correspondent.)

FROM the report presented at the last meeting of the Municipal Council by Dr. Depaul, Professor of Midwifery at the Faculty, and head of the Vaccination Department of the Academy of Medicine, it appears that the vaccination service of the various *mairies*, or mayoralties, of the city is very imperfectly carried out. Dr. Depaul is a most competent authority on the subject, and in his report he pointed out various shortcomings and defects which render vaccination much less efficacious and satisfactory than it ought to be. Indeed, he complained that the present system of vaccination at the *mairies*, as it is organised by the municipal authorities, was purely nominal. Thus, scarcely three or four of the *mairies* out of the twenty which exist in Paris, communicated to the Central Administration the documents which they possessed, or ought to possess, on this important question. On the other hand, Dr. Depaul acknowledges that the sum of 10,000 francs voted annually by the Council for this special department was quite insufficient to meet all the requirements of the service. The reporter therefore concluded by asking that a special committee should be appointed in the Council to investigate the question, and consult the Academy of Medicine, and this was voted unanimously by the members present.

The bulletin published by the municipal authorities for the week ending last Saturday (Nov. 30th) mentions only one death from cholera. The number was four during the preceding week. The total number of deaths from various causes has decreased from 828 to 808.

Claude Bernard has opened his winter course of lectures at the Collége de France. The illustrious physiologist chose for the subject of his lecture "The Blood and Circulation." Dr. Marey had already inaugurated his course at the same institution with an introductory lecture on the "Mechanism of Motion."

The Society for the Protection of Infants came to an important decision at its last sitting. It voted a second sum of 40,000 francs (a first fund of the same amount having been speedily exhausted) for the purpose of assisting "poor parents who have been obliged to send their children to wet-nurses in the country, and who can no longer afford to pay for the nursing of the infants." This shows one of the many ways in which the Society has contributed most usefully since its foundation to the protection of infant life and the public good.

At the last meeting of the Council of the Society for Help to the Wounded a vote took place for the nomination of a President to the Society in lieu of Count de Flavigny, whose death I mentioned in my last letter. The Duc de Nemours was elected President by twenty-four votes. Two votes were given to M. de Meaux, and one to Dr. Ricord. There were seven votes lost.

The house-surgeons of the Hôtel Dieu of Caen have just received a most flattering testimonial from the Administrative Council of the hospitals of that town for their handsome conduct during the recent cholera epidemic.

It is mentioned that the *concours* among all the house-surgeons of the Paris hospitals, which ended a few days ago, was a most remarkable one, all the candidates giving proof of extensive reading and competing most energetically for the various prizes. The contest for the first prize, or gold medal of the Paris hospitals, was a close one between two champions, MM. Rendu and Renaut, and ended in a dead-heat, the two coming in *ex æquo*. According to the regulations in such cases, the prize was to be given to the candidate who had already gained one of the hospital medals at a previous *concours*; so it was bestowed on M. Rendu, whilst his competitor was presented with a silver medal.

The building works of the new Hôtel Dieu are about to be resumed. They had been abandoned by the contractors, who had vainly claimed an indemnity for the suspension of the works during the siege and Commune. But the Council of the Prefecture, after rejecting the claim, has summoned the dissatisfied contractors to go on with the building without further loss of time. The question, it is supposed, will be brought before the Council of State.

The discussion on the proposed laws for liberty of superior education, which was to have taken place last Monday, has been postponed until Monday week. As regards the question of medical reform especially, it appears that the Commission has adopted the most liberal views, with the only reserve that the State alone will have the right of conferring diplomas.

The troops which are quartered in the country encampments around Paris (such as Meudon, Satory, Rocquencourt, St. Germain, Villeneuve l'Étang, and Saint Maur) will stay there this winter, as they did last winter, the results having shown that their health in no way suffered therefrom. A distribution of warm clothing has already been made among them.

The chair of Embryogeny at the Collége de France, rendered vacant by the death of Coste, will shortly be filled. There are three candidates of great merit who aspire to be Coste's successor. One, M. Gerbe, was his assistant and co-operator for several years; another, M. Dareste, of Lille, is well known by his remarkable researches on experimental teratology, which he has been conducting for the last twenty years; the third, M. Balbiani, is at present at the head of the histological department of Claude Bernard's laboratory of general physiology at the Museum of Natural History. He has written several important works on the phenomena of development of insects, and will very likely be the successful candidate.

Paris, December 8th, 1873.

THE COLLEGE OF SURGEONS.

AT the Council meeting on Thursday last, the 11th inst., some important appointments were made. Mr. Erichsen was elected to fill the vacancy caused by the resignation of Mr. Quain among the representatives of the College in the Committee of Reference upon the Conjoint Examination Scheme. Mr. William K. Parker, F.R.S., whose researches on the Foraminifera, the development of the skull of the fowl and frog, &c., are well known, was appointed to act as Professor Flower's *locum tenens* during that gentleman's absence from ill-health. We congratulate the Council on its selection. Mr. Savory was appointed a member of the Dental Board, in place of Mr. Hilton, resigned; and Mr. Doran, of St. Bartholomew's Hospital, was appointed an assistant in the museum.

Professor Humphry brought forward a motion proposing to open the Fellowship of the College to members of only *two* years' standing; but, on the motion of Mr. Simon, the whole subject of the examination for the Fellowship was referred to a committee. We shall return to the consideration of this important question next week.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following Members, having passed the required examinations for the Fellowship on Nov. 27th, 28th, and 29th, were, at a meeting of the Council held on the 11th inst., duly admitted Fellows of the College:—

Franklin, Geo. Cooper, L.R.C.P. Lond., Victoria-park Hosp.
Penhall, John Thomas, L.S.A., St. Leonards-on-Sea.
Saunders, Henry Wm., M.B. Lond., L.S.A., Royal Free Hosp.
Thomas, Andrew Appeby, L.R.C.P. Lond., H.M. Indian Army.
Woodman, Samuel, L.R.C.P. Lond., Ramsgate.

Five other candidates were examined, but failed to satisfy the Court of Examiners, and were referred to their professional studies for twelve months.

UNIVERSITY OF LONDON.—The following are lists of the candidates who have passed the recent examinations:—

M.D. EXAMINATION.

Anderson, Tempest, B.Sc., B.S., Univ. Coll.
Aveling, Charles Taylor, M.S., St. Thomas's Hosp.
Barnes, Edgar George, St. George's Hosp.
Barn, William Barnett, B.Sc., St. Barthol. Hosp.
Cane, Leonard, B.S., Univ. Coll.
*Carr, William Ward, B.S., Univ. Coll.
Dalton, Benjamin Neale, Guy's Hosp.
Humphreys, John Henry, Univ. Coll. and Middlesex Hosp.
Langmore, John Wreford, B.S., Univ. Coll. and Middlesex Hosp
Oliver, George (Gold Medal), Univ. Coll.
Roberts, Richard Lawton, Univ. Coll.
Sawyer, James, Queen's Coll., Birmingham.
Shewen, Alfred, Univ. Coll.
Smith, Richard Thomas, Univ. Coll.
Wall, Alfred John, B.S., St. Mary's Hosp.
Warner, Francis, King's Coll.
Wyman, John Sanderson, St. Barthol. Hosp.

LOGIC AND MORAL PHILOSOPHY ONLY.

Ingoldby, Joseph Theodore, Guy's Hosp.
Price, William, Univ. Coll.
Spencer, George Owthwaite, Univ. Coll.

M.S. EXAMINATION.

Godlee, Rickman John, B.A. (Gold Medal), Univ. Coll.

SECOND M.B. EXAMINATION (HONOURS).

MEDICINE.

FIRST CLASS.

Addy, Boughton (Gold Medal), St. Thomas's Hosp. } Equal
Skerritt, Edw. Markham, B.A. (Gold Medal), Univ. Coll. }
Dodson, Andrew, Birmingham and Guy's Hosp.
Cockburn, John Alexander, King's Coll.
Barlow, Thomas, B.Sc., Univ. Coll. } Equal.
Benham, Henry James, Univ. Coll. }

SECOND CLASS.

Coupland, Sidney, Univ. Coll. and Middlesex Hosp.
Rayne, Charles Alfred, Univ. Coll.

THIRD CLASS.

Dyson, William, B.A., Univ. Coll.
Pope, Harry Campbell, Liverpool Royal Infirm. and Univ. Coll.

OBSTETRIC MEDICINE.

FIRST CLASS.

Addy, Boughton (Scholarship and Gold Medal), St. Thomas's Hosp.
†Skerritt, Edw. Markham (Gold Medal), Univ. Coll.
‡Dodson, Andrew, Birmingham and Guy's Hosp.
Benham, Henry James, Univ. Coll. } Equal.
Bomford, Gerald, King's Coll. }
Colgate, Henry, Univ. Coll.

SECOND CLASS.

Petch, Richard, King's Coll.
Bird, Cuthbert Hilton Golding, B.A., Guy's Hosp.
Barlow, Thomas, Univ. Coll.
Cockburn, John Alexander, King's Coll.
Dyson, William, Univ. Coll.

* Obtained the number of marks qualifying for the Medal.
† Obtained the number of marks qualifying for the Scholarship.
‡ Obtained the number of marks qualifying for a Gold Medal.

THIRD CLASS.

Rayne, Charles Alfred, Univ. Coll.
Pope, Harry Campbell, Liverpool Royal Infirm. and Univ. Coll.
Firth, Charles, St. Barthol. Hosp.
Railton, Thomas Carleton, Manchester and St. Barthol. Hosp.
Coupland, Sidney, Univ. Coll. and Middlesex Hosp.

FORENSIC MEDICINE.

FIRST CLASS.

Colgate, Henry (Scholarship and Gold Medal), Univ. Coll.
Bird, Cuthbert Hilton Golding (Gold Medal), Guy's Hosp.
Benham, Henry James, Univ. Coll.
Barlow, Thomas, Univ. Coll.
Cockburn, John Alexander, King's Coll.
Coupland, Sidney, Univ. Coll. and Middlesex Hosp.

B.S. EXAMINATION.

FIRST DIVISION.

Barlow, Thomas, B.Sc., Univ. Coll.
Colgate, Henry, Univ. Coll.
Lucas, Richard Clement, Guy's Hospital.
Rayne, Charles Alfred, Univ. Coll.
Skerritt, Edward Markham, B.A., Univ. Coll.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Dec. 4th:—

Arthur, Walter, Oakley-street, Chelsea.
Barnes, Arthur Richard, Faversham.
Charnley, William, Lancaster.
Mason, Samuel Butler, Denham, Uxbridge.

The following gentlemen also on the same day passed their Primary Professional Examination:—

David Thomas Evans and Charles Rees, Guy's Hospital; Henry George Armstrong, Herbert Leopold Bernays, and Sydney Lloyd Smith, St. Thomas's Hospital; Augustus William Higgs, St. Mary's Hospital.

METROPOLITAN HOSPITAL SUNDAY FUND.—A meeting of the council of the above fund was held at the Mansion House on Wednesday, at which Alderman Sir Sydney Waterlow presided. Mr. Henry N. Custance, formerly secretary and superintendent of the Middlesex Hospital, was elected secretary to the fund. There were 328 candidates for the post, to which the salary attached is £250 a year. In respect of the arrangements for Hospital Sunday in next year—Sunday, June 14—it may be mentioned that nearly 700 ministers of all denominations have already consented to set apart that day for collections in aid of the fund, and it is confidently expected that on the next occasion the number of places of worship contributing to the success of the movement will be considerably larger than in this year, and that the amount collected should be proportionately increased.

Medical Appointments.

ATKINS, F. T., L.R.C.P.Ed., M.R.C.S.E., has been appointed House-Surgeon to the Kent and Canterbury Hospital, vice Vacher, resigned.

BETHUNE, D., L.R.C.P.Ed., L.F.P. & S.Glas., has been appointed Medical Officer to the Workhouse, and Medical Officer and Public Vaccinator for the Ponteland District of the Castle Ward Union, vice Marr, resigned.

BLYTH, A. W., M.R.C.S.E., has been appointed Medical Officer of Health for the Bideford, Dulverton, Okehampton, South Molton, and Torrington Rural Sanitary Districts: £350 per annum.

BROWN, J. A., M.R.C.S.E., has been appointed a Medical Officer at the Peckham House Lunatic Asylum.

BROWN, R. C., M.B., F.R.C.S.E., M.R.C.P.L., has been appointed Medical Officer for the Preston District of the London and North-Western Railway, and for the Preston District of the Lancashire and Yorkshire Railway, vice Howitt, deceased.

CHESTNUTT, J. W., M.D., L.R.C.S.Ed., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Ahoghill Dispensary District of the Ballymena Union, Co. Antrim, vice Houston.

COLLINS, G. N., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Manaton and Moreton Districts of the Newton Abbot Union, vice Nosworthy, deceased.

CUTLER, H., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Droitwich District of the Droitwich Union, vice Gibson, resigned.

DIXON, W. H., M.D., has been appointed Medical Officer to the Post-office, Sunderland, vice Yeld, resigned.

EMMSON, R., M.R.C.S.E., has been appointed Medical Officer of Health for the Gainsborough Rural Sanitary District: £150 for one year.

FLETCHER, T. B. E., M.D., F.R.C.P.L., has been appointed Consulting Physician to the Birmingham and Midland Counties Orthopædic Hospital, vice Evans, deceased.

FOX, Mr. M., has been appointed a Midwifery Assistant at the Steevens's Hospital and Medical College, Dublin.

FUSSELL, Dr. E. F., has been appointed Medical Officer of Health for the Cuckfield Rural Sanitary District, combined with several others: £300 per annum for three years.

GARRETT, J., M.R.C.S.E., has been appointed Assistant Medical Officer at the Grove Hall Lunatic Asylum, Bow, vice Brown, resigned.

GIBBES, C. C., M.B., C.M., has been appointed House-Surgeon to the South Devon and East Cornwall Hospital, Plymouth, vice Payne, resigned.

GRAVELY, T., M.R.C.S.E., has been appointed Medical Officer for District No. 7 of the Horsham Union.

HAYDEN, W. H., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Woodburn or No. 8 District of the Wycombe Union, vice Littlewood, resigned.

HOUSTON, Dr. J. K., has been appointed Medical Officer to the Belfast Union Fever Hospital.

ILIFF, W. T., M.D., M.R.C.S.E., has been appointed Examining Surgeon to the Infant Orphan Asylum, Wanstead, vice Dalby, deceased.

JONES, T. E., L.R.C.P.Ed., L.F.P. & S.Glas., has been appointed Medical Officer and Public Vaccinator for the Penderyn District of the Merthyr Tydfil Union, vice Llewellyn, resigned.

MACDOWALL, J. W., M.B., L.R.C.S.Ed., has been appointed Medical Officer to the Oakenshaw Colliery, near Durham, vice Marchbank, deceased.

MAGRATH, J. M.D., has been appointed Physician to the Metropolitan Dispensary and Charitable Fund, vice Dansou, resigned.

MATURIN, Mr. L., has been appointed a Midwifery Assistant at the Steevens's Hospital and Medical College, Dublin.

MAUNDER, C. F., F.R.C.S.E., has been appointed a Consulting Surgeon to the Merchant Seamen's Orphan Asylum, Snaresbrook, vice Startin, deceased.

MOIR, J., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer for the Keynsham District of the Keynsham Union, vice Colthurst, resigned.

O'KELLY, R. A., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer to the Cork Union Workhouse, vice Gardiner, deceased.

O'LEARY, E., M.R.C.S.E., L.R.C.P.Ed., has been appointed Medical Officer, Public Vaccinator, and Registrar of Births &c., for the Woodstown Dispensary District of the Waterford Union, vice O'Sullivan, deceased.

PINCK, Mr. W., has been appointed Medical Officer and Public Vaccinator for the Falstone District of the Huddersfield Union, vice Trotter, resigned.

PRIOR, C. E., M.D, has been appointed Medical Officer of Health for the Woburn Rural Sanitary District: £70 for one year.

PURNELL, T., M.D., has been appointed Medical Officer of Health for the Wells Rural Sanitary District: £125 per annum.

ROBERTS, T., M.R.C.S.E., has been appointed a Medical Officer for the Twyford District of the Hampshire Friendly Society.

SELWOOD, H. C., M.D., M.R.C.S.E., has been appointed a Medical Officer for the Twyford District of the Hampshire Friendly Society.

SIMMONS, B., M.R.C.S.E., has been appointed Medical Officer to the Odd Fellows' Society, Wotton-under-Edge, vice Bullock, deceased.

SYMES, W. S., L.R.C.S.I., L.K.Q.C.P.I., has been appointed Medical Officer and Public Vaccinator for the Mexborough Dispensary District of the Mountmellick Union, vice Hickson, resigned.

TATTERSALL, W. J., L.R.C.P.L., M.R.C.S.E., has been appointed an Hon. Medical Officer to the North Dispensary, Liverpool, vice Paterson, resigned.

THORNTON, Dr., has been appointed Surgeon to the Out-department of the Samaritan Free Hospital for Women and Children, vice Thomson, resigned.

TIMMINS, J. A. J., M.B., L.R.C.P.L., M.R.C.S.E., has been appointed Medical Officer for the Llangendeirne Upper District of the Carmarthen Union, vice Morgan, deceased.

TOUCH, Dr. E., has been appointed Parochial Medical Officer and Public Vaccinator, and Medical Officer to the Local Authority, Inverary, vice Saxby, deceased.

WILKINS, E. W. S., M.R.C.S.E., has been appointed Assistant House-Surgeon to the Halifax Infirmary and Dispensary, vice Hoyle, promoted.

Births, Marriages, and Deaths.

BIRTHS.

BAKER.—On the 9th inst., at New Romney, the wife of C. Eaton Baker, M.R.C.S.E., late of Skinner House, Ledd, of a son.

DICKSON.—On the 6th inst., at Fairfield, Upper Norwood, the wife of Walter Dickson, M.D., R.N., of a daughter.

INCE.—On the 9th ult., at Rawalpindi, Punjab, the wife of Surgeon-Major John Ince, M.D., Civil Surgeon, of a son.

PRITCHARD.—On the 26th ult., at Greenstreet, near Sittingbourne, the wife of Dr. G. F. Pritchard, of a daughter.

RHODES.—On the 6th inst., at Royal-terrace, Weymouth, the wife of Chas. Rhodes, M.D., of a son.

SEXTON.—On the 15th of Sept., at Rajkote, Bombay, the wife of E. Sexton, M.D., Surgeon-Major 18th Regiment N.I., of a daughter.

WINTERBOTHAM.—On the 4th inst., at Bay's-hill, Cheltenham, the wife of Lauriston Winterbotham, M.R.C.S.E., of a daughter.

MARRIAGES.

EATON—BARRIE.—On the 4th inst. at Hamilton-place, Motherwell, N.B., John Eaton, M.D., C.M., of Trumpet House, Cleator-viâ-Carnforth, to Maggie, eldest daughter of J. S. Barrie, M.D., F.F.P. & S.Glas., of Motherwell.

WILSON—SHEPPERSON.—On the 26th ult., at St. Thomas's Church, Ponder's-bridge, Whittlesea, J. Mitchell Wilson, M.B., of Chatteris, Cambs, to Mary Ann, only daughter of W. Shepperson, Esq., of Underwoods, Whittlesea.

DEATHS.

CHAPMAN.—On the 28th ult., at Westfield House, Canterbury, H. Chapman, late Surgeon Hon. E.I.Co.'s Service, Bengal Presidency, aged 73.

LAMB.—On the 2nd inst., at Richmond-road, Barnsbury, of rheumatic fever, Robert Lamb, L.R.C.P., M.R.C.S.E., L.S.A., aged 38. Friends will please accept this intimation.

PROBART.—On the 19th ult., Thos. Brereton Probart, L.S.A.L., of Tetford, near Horncastle.

RICHARDS.—On the 1st inst., at Oxford-terrace, Islington, Dinah, widow of the late Joseph Richards, M.R.C.S.E., formerly of St. Clement Danes, aged 70.

WHITEHEAD.—On the 20th ult., John Whitehead, Surgeon, of Seven Sisters-road, aged 52.

Notes, Short Comments, and Answers to Correspondents.

DUTIES OF MEDICAL OFFICERS OF HEALTH.

WE have been favoured with the following note from a correspondent:—

"In your answer to 'Enquirer' (p. 821), you say, '(2) The medical officer has power to enter, inspect, and order the owner or occupier to remedy defects under the Sanitary Act, 1866.' I think this answer may mislead, as it is expressed too generally. By 35 and 36 Vict., c. 79, s. 9, the medical officer of health may exercise all the powers with which an inspector of nuisances is invested by the Sanitary Acts or any of them. Now, the Sanitary Act of 1866, 29 and 30 Vict., c. 90, s. 20, requires that the nuisance authority should call upon the inspector of nuisances to make inspection for nuisances; but it proceeds to enable a justice to make an order for admission upon complaint on oath. So that the medical officer cannot enter premises without consent, unless he obtains an order of a justice. When he has entered and made inspection, he can recommend, advise, and report; but I do not think there is any provision which empowers him to make any order upon either the occupier or owner. It is, of course, important that the medical officer should not go beyond his legal powers, as he will thereby lose the great advantages which result from his position of medical sanitary adviser. I may also state that the officer of police, who under s. 16 may be called upon to enforce the provisions of the Nuisances Removal Acts, cannot enter a house without consent, or without a warrant of justices."

TOBACCO-SMOKING BY THE TROOPS IN THE ASHANTEE WAR.

Dr. Drysdale has sent us a lengthy communication on this subject, in which he epitomises the objections that have been urged from time to time by English and Continental observers against the use of the "pipe." Our views have been stated sufficiently often, and there is no need to reiterate them now. We consider that the army doctors were perfectly justified in counselling that supplies of tobacco should be forwarded for the use of the troops. Putting aside all the scientific quibbling and medical objections that might fairly be urged against the use of tobacco in "piping times of peace," we hold that, on moral grounds alone, it was expedient not to deprive the soldier of his pipe in a war of this kind. Soldiers smoke tobacco, and, rightly or wrongly, they will continue to do so, spite of doctors, if they can manage to procure "the weed." The inculcations of science in the parlour may be very good; but the soldier does not heed them, and the authorities may be well contented to risk the physical evils for a contented mind. It is all very well for those "who sit at home at ease" to inveigh against the custom; but why should they seek to deprive an unfortunate soldier of a solace at this time, of all others, when he is exposed to dangers of various kinds, to long marches, and little food probably, and when he has so few comforts to soothe him? As to the expense of the habit, it does not fall on the soldier; and, as practical men, we take it that the British taxpayer, however much he may grumble at the expenses entailed by this war, will grudge least of all that portion which contributes to providing the Black Watch with their tobacco.

Sir Henry Thompson's lecture "On the Future of Operative Surgery for Stone in the Bladder" shall be published next week.

HEALTH OFFICERS AND "QUARTERLY RETURNS."

To the Editor of THE LANCET.

SIR,—I am much pleased that "A Medical Officer of Health" and "Nil Desperandum" have written about the Government forms for returns of pauper maladies and deaths. Confessing that the Local Board have a right to demand from us statistics relative to our office, I, on the other hand, deem it a most unjust proceeding their asking us to obtain information from public institutions which some of us never enter, and consequently have little communication with; and perhaps, as in my case, the less contact with the officials of such institutions the better. Meeting the secretary of a public hospital, and asking him if he could furnish me with the requisite information, I was answered that such should be done if payment was guaranteed. Again, how is the health officer to obtain access to the parish books? For the copies of the register supplied to me by the local registrar of births and deaths I pay £8 8*s.* per annum out of my salary. Why the Board in London have thought proper to place us in such an unenviable position, by asking us to supply information which cannot be procured without payment, I am quite at a loss to conceive. As for myself, I do not intend to place myself under the obligation of obtaining the information without knowing of what utility or for what purpose the statistics wanted can be used. They cannot point out what epidemics or diseases have been prevalent, as paupers only are included, and every parochial medical officer knows that the majority of such cases coming under his observation are bronchitis, rheumatism, and old age—in fact, these three complaints are the chief ailments of applicants for medical relief. Do not suppose that I wish to throw any obstacle in the way of the officials in London of obtaining information how we are doing our work, as perhaps a little supervision would do some good, and assist many; but I do think it will be the opinion of a large staff of deserving and hard-working health officers that extraneous work should not be imposed upon us.

I am, Sir, yours, &c.,

November, 1873. A HEALTH OFFICER OF SEVEN YEARS' STANDING.

ST. THOMAS'S HOSPITAL.

Mr. Hamilton Peck has written to us to contradict a statement in the *Daily News* relative to the alleged misbehaviour of medical students during the course of an inquest. We are glad to learn that there was no foundation for the accusation, and regret that it should have appeared in such a respectable and careful paper as the *Daily News*.

ELASTIC COMPRESSION IN OPERATIONS.

THE *Gazette Médicale de Paris* reports a communication addressed by M. Demarquay to the Société de Chirurgie, giving the results of his observations as to the efficacy and advantages of this plan. By its application, an amputation of the leg, a removal of the index-finger and part of the first metacarpal bone, and an excision of a fibro-vascular tumour from a child's arm were performed without any loss of blood or subsequent bad effects. M. Demarquay goes on to say that before employing this plan he had some fears, which, however, were satisfactorily dissipated. In the first place, he convinced himself of the absence of the pain which he was inclined to ascribe to the pressure, by applying the elastic tubing for fifteen or twenty minutes to the limb of a woman suffering from varicose veins. Secondly, he continues, fears might be entertained that throwing back all the blood of a member into the general circulation would have a prejudicial effect on the system; but this is not the case, as Esmarch, for operations on two limbs in the same person, had them both compressed at the same time without any constitutional mischief accruing. Thirdly, a question might arise as to whether the total arrest of circulation in a limb for a period varying from fifteen to forty-five minutes would not have a detrimental effect on the operation itself, and whether the pressure of the india-rubber tube would not tend to injure the large vessels. On these subjects M. Demarquay has consulted Professors Billroth and Mosetig, and has been quite reassured by them as well as by Esmarch himself. In the discussion that followed this communication, a question of priority was started. M. Verneuil reminded his hearers that elastic compression had been employed before Esmarch by an Italian surgeon, M. Grandesso Silvestri. M. Guyon, with the same idea, employed a method, used also with great success by Messrs. Lannelongue and Verneuil, which, though less perfect than that introduced by Esmarch, presents many advantages. It consists in elevating the limb about to be operated on; then when the patient is under the influence of chloroform, and the surgeon is about to make the first incisions, effecting arterial compression, and applying a constricting band. This method does not produce complete anæmia of the part, but it prevents the loss of venous blood. M. Chassaignac also claims for himself the first idea of elastic compression for the control of arterial circulation in operations dating as far back as 1856.

Mr. J. Roche Lynch.—The paper shall appear *quàm primùm*.

THE CLIMATE OF EGYPT.

To the Editor of THE LANCET.

SIR,—"Enquirens" will find Alexandria itself until the end of April answer his desiderata, and a very excellent physician, Dr. Mackie (as also others) has resided there for over ten or twelve years. Great preference is given by many physicians sending patients abroad to Cairo, but I do not think upon any substantial ground. I think more of Palermo or Tangiers, or, if the sanitary arrangements there are defective, try Algiers. I do not know any resident English physician, but there are some excellent French ones. I shall be happy to answer any private communication. I think all invalids should, on first going to these depôts, consult the resident medical men, since during fifteen years' moving about the Mediterranean I have seen much injury done by the patient to himself in being too closely wedded to the advice given by his family doctor to visit such and such a place (who perhaps is at the best only guided by report, or probably some reminiscence of the place by a visit to it previous to going into practice), and remaining there simply because the prescribed time for which he was ordered to remain has not elapsed, when a local doctor could have sent him to some more suitable place both to his body and his pocket. Yours, &c.,

30, Casey-terrace, Reading, Dec. 1873. FRANK GODFREY.

A Health Officer.—Cooper's Salts have proved of the highest efficacy in disinfecting sewers and drains. They are also the cheapest agent. What quantity of carbolic acid is equivalent in disinfecting power to a hundredweight of Cooper's Salts should be ascertainable from the patentee.

Mr. Robert Preston.—The coroner for Middlesex always pays witnesses for adjourned cases.

M. E. Decroix, (Paris.)—Nous ne pouvons insérer la note de notre correspondant.

Sincerely Anxious should consult his medical attendant.

PERSISTENT SNEEZING.

To the Editor of THE LANCET.

SIR,—If "Practitioner" will give his patient ten grains of the iodide of potassium combined with infusion of quassia three times a day for four days, and then increase the iodide to fifteen grains three times a day, he will in a fortnight quite cure his patient. I have found this remedy succeed when the "guns of London" failed to strike the target.—Yours faithfully,

Hounslow, Dec. 9th, 1873. W. M. WHITMARSH, M.D.

To the Editor of THE LANCET.

SIR,—In reply to your correspondent, "Practitioner," I would suggest belladonna if he has not already tried it. From personal experience I have found the greatest relief from two or three doses at the commencement of catarrh, when sneezing has been one of the most distressing symptoms.

Yours truly.

Donington, Dec. 8th, 1873. E. W. J.

To the Editor of THE LANCET.

SIR,—If "Practitioner" gets his patient to inhale chloroform gently, or to press the tip of the forefinger against the upper lip firmly below the middle of the nose while the inclination to sneeze continues, I think he will find relief. I saw the above suggestions in THE LANCET of September, 1869, and have tried them successfully in one obstinate case since.—Yours truly,

December, 1873. P. M. RICE.

EFFECTS FOLLOWING THE REMOVAL OF HAIR AND VARNISHING THE SKIN OF ANIMALS.

IN the discussion that followed the reading of Dr. Johnson's paper at the Clinical Society on "Temporary Albuminuria, the result of Cold-bathing" (reported in the last number of THE LANCET), Dr. Johnson adduced the fatal results attending the experiment of cutting off the hair of animals and varnishing the skin as evidence of the injurious effects of the suppressed function of the skin. In connexion with this subject we may call attention to another way of accounting for these phenomena—viz., the loss of heat by radiation and conduction, specially pointed out by Pettenkofer in his "Lectures on the Air in relation to Clothing, Dwelling, and Soil." Furred animals, such as dogs, rabbits, &c., cannot live when they are shorn and their skin varnished or oiled. One used to explain their death by the suppression of the evaporation from their skin; but it can be proved that even in a comfortably warm room these animals literally freeze to death. Krieger sheared a rabbit, after having noted its temperature and frequency of respiration; they were 102° and 100 per minute. He did not use any varnish to avoid any possible suppression of evaporation from the skin, but enveloped the shorn animal in a wet cloth. The temperature of the room being at 66°, the animal lost so much heat that after five hours its interior temperature had fallen to 75°, and its respiration to 50 per minute.

Mr. T. Blackman.—The case is a very bad one on the part of the guardians. We should recommend our correspondent to take a legal opinion as to the course to be pursued.

A Subscriber to St. Peter's Hospital.—Under consideration.

Mrs. W. (Margate) should take the opinion of her usual medical attendant on the point.

A QUERY.

To the Editor of THE LANCET.

SIR,—Can any of your numerous readers give me some idea whether there exists an institution for incurables or otherwise, into which it would be possible to get a governess (French or Swiss) who is suffering from cancer, and who is now passing a miserable existence in a garret in the metropolis, a victim to this dire disease? In her calling she has been connected with good and wealthy families, who would be very glad to see her comfortably housed in an institution where she would be properly nursed and cared for, instead of ending her days in a dismal lodging, and who would willingly aid her in a pecuniary sense in furtherance of the above object. She has, I believe, been an inmate of the Cancer Hospital. Any information that your readers could give me in aid of this charitable object would be most gratefully received by,

Your obedient servant,

Torquay, Dec. 10th, 1873. MEDICUS.

Red Cross, (Liverpool.)—During the siege of Paris the American system of ambulances, founded by Dr. Evans, did excellent service. His work, "History of the American Ambulances established in Paris during the Siege of 1870-71," furnishes, with the preceding works of the same author, an exhaustive repertoire on the subject of the treatment of the wounded, and will shortly be reviewed.

F.R.C.S.—We do not remember the publishers. Perhaps Dr. Bright, The Glen, Forest Hill, might be able to give particulars of the Sydenham tariff. If we remember rightly, he was honorary secretary of the meeting at which it was agreed to.

Mr. Jeaffreson, (Newcastle.)—The account was received. Want of space, however, prevented us from publishing it.

L.R.C.P.—Apply to the Dean of the University.

Mr. T. O. Wood.—Such a question can only be answered by two persons, our correspondent and the proprietor of the asylum. The services are very considerable; but we gather from our correspondent's letter that private practice and other work is permitted. And, doubtless, connexion with the asylum will be in itself advantageous.

A Constant Reader.—We should regard the site as an undesirable one.

Mr. Tobin.—Next week.

THE MEDICAL CLUB.

To the Editor of THE LANCET.

SIR,—The further support of the profession is invited to the Medical Club. Great complaint was very justifiably made, it appears to me, when the subscriptions of the original members were raised, and as a consequence many left off all connexion with it. Many like myself seldom, if ever, used the building, but were willing to pay £1 1s. per year towards maintaining an institution which they could see might do some professional good. Would it not be an act of courtesy to those old members, and a pecuniary advantage to the Club, if such were readmitted on the original terms?

I am, Sir, your obedient servant,

December, 1873. LIBERAL-HEARTED.

Doubly Qualified.—1. A M.R.C.S. Eng., registered, is legally qualified to sign a vaccination certificate. It would be a sad reflection on his diploma if he were not.—2. He cannot recover for attendance on a purely medical case.—3. A special diploma is not required for midwifery, nor indeed any.

THE important communication of *Mr. Thomas Moore* arrived too late for this week's issue. It shall appear in our next.

H. W.—1. The two degrees have been generally recognised as about equal. 2. L.R.C.P. London entitles its holder to call himself "physician."—3. It does not entitle him to call himself "doctor," which is a degree, and can be granted only by a University.

Bronchophony's notes will be gratefully received.

Mr. McAllister, (Loire Inférieure.)—We do not under any circumstances prescribe.

Dr. Demarquay is thanked for his courteous letter, and for the offer of his valuable communication.

SANITARY CONDITION OF DROGHEDA.

THE sanitary condition of this town in respect to sewerage and supply of water having been brought under the notice of the Local Government Board, that body lately sent an inspector to examine into the complaints made against the Corporation of Drogheda for their remissness in the above matters. The inspector's report has not yet been made public; but there is little doubt that suggestions will be made in reference to the present unsatisfactory condition of affairs, which will have the effect of rendering Drogheda more salubrious and less offensive to the eye than heretofore.

Objectus.—Analysts, 1, 3, 6, 8; Medical Officers of Health, 9, 10, 13, 14. Our correspondent may select any of the above numbers.

Mr. C. J. Symonds and *Mr. Alfred W. Greene.*—Received with thanks.

VACCINATION AWARDS.

To the Editor of THE LANCET.

SIR,—As you have adopted the unusual plan of personally answering my note on vaccination awards, you will, I am sure, allow me a short reply. In so doing you will show all the more candour, as you evidently have some strong opinions on the question; for three pages on you insert a statement of your own that "public vaccinations must be at vaccination stations." Allow me to remind you that THE LANCET is a power in the profession and in political life, and that if you knew the inconveniences you may contribute to put on our hard-working Poor-law surgeons, and on the poor generally, you would feel your way cautiously. If you had been a Poor-law surgeon, you would see how much better in other senses it is to leave the selection of time and place to the surgeon. The Government order says the child must be vaccinated as soon as possible after it is three months old, *or* at the next half-yearly appointment. One plan or time is as legal as the other. The man who adopts both is generally able to use fresh lymph, and even liquid, in going from one village to another, and at all times he has it from healthy children; for he can select them more leisurely when he does five or six in the month in addition to the children of his own private practice, and he can pay more attention to cleanliness in preventing the possibility of transmitting either the blood or the lymph of an unhealthy into a healthy child. These acts require leisure, and a careful recognition of the family history of children from whom we take the lymph. "Nulla fronti fides" is an element in this problem, and "Nimium ne crede colori" is another. We examine the present state and aspect of the child and the personal history of the patients, the latter generally as well known to the local surgeon as the former. If we do not feel justified in taking fresh lymph, we use some which has been kept a week in air-tight glasses. He must be a sciolist who doubts its efficacy when he finds it produce a perfect Jennerian vesicle. Thus week by week most of the public vaccinators diminish the otherwise pell-mell and hurried work of the half-yearly appointment; but they are to be deprived of any mark of respect which the Vaccination Board can give. Surely if cautious men who have grown grey in general practice like to adopt both the plans sanctioned by the Government, they ought not to be treated invidiously, especially as strong reasons can be given in favour of the opinion that the two are better far than one of them alone. The real question is why one clause of a sentence is to be taken and the other ignored. It is not a question, Mr. Editor, about the "spirit" of a law. I limit myself altogether in this, as in my former letter, to public vaccinations.

I am, Sir, yours truly,

St. Ives, Hunts, Dec. 6th, 1873. J. DEANE, M.D.

*** We print this letter at our correspondent's request. His observations hinge altogether upon the statement he makes, that "the Government order says the child must be vaccinated as soon as possible after it is three months old, *or* at the next half-yearly appointment." We are unaware of such an order. The Vaccination Act, 1867, sec. 16, requires that "the parent of every child born in England shall within three months after the birth of such child, or where by reason of the death, illness, absence, or inability of the parent, or other cause, any person shall have the custody of such child, such person shall within three months after receiving the custody of such child, take it or cause it to be taken to the public vaccinator of the vaccination district in which it shall be then resident, according to the provisions of this or any other Act, to be vaccinated, or shall within such period as aforesaid cause it to be vaccinated by some medical practitioner," &c. Section 12 of the same Act empowers guardians, with the consent of the Poor-law Board (now Local Government Board), in districts where the population is scanty or much scattered, or where some peculiar circumstances may render it expedient for them to do so, to provide for the attendance of the public vaccinator at the appointed place after intervals exceeding three months; and if by reason of such interval the vaccination of any child cannot be performed within the respective periods herein prescribed, no parent or other person shall be liable to any penalty in respect of a neglect to procure the vaccination during any such period; but every such parent or other person shall be bound to procure such vaccination to be performed at the time and place so appointed before the commencement of the next interval, unless it be otherwise performed by a medical practitioner as herein provided, or unless the child shall be certified to be then in an unfit state for or insusceptible of vaccination. Much of the dissatisfaction which has been expressed in our columns as to vaccination awards and other matters relating to vaccination, we believe to have arisen from misapprehensions, similar to the above, on the law of vaccination and the regulations made under it. It should be obvious that until these are clearly understood, discussion of the arrangements made under them cannot be carried on to any useful purpose; and the object of our observations last week was to suggest to our correspondent, and others who feel with him, how greatly their argument is vitiated by misapprehensions of the conditions of public vaccination required by the law, and the principles which have determined these conditions.—ED. L.

THE SEQUELÆ OF DENGUE FEVER.

DR. MANSON, in his medical report on the health of Amoy for the half-year ending March last, published in the *Customs Gazette*, continues his account of the epidemic of dengue, which had prevailed so extensively in and around Amoy as to have affected most of the inhabitants. He describes the sequelæ of the disease. Persistent rheumatic-like pains in the feet were very common, and continued to trouble many patients months after all other traces of the disease had vanished. These pains were most capricious in their appearance—one day altogether absent, the next so severe as almost to incapacitate the sufferer from putting his feet to the ground. They were usually worst in the morning on getting out of bed. In one instance the right arm and hand were so painful that for a long time the limb was quite useless, practically paralysed; the hand swelled considerably, and during the night the whole limb was the seat of a burning heat. In this case great relief followed the employment of faradisation. In another case, that of an elderly gentleman, the attack of dengue was followed by a gradual and increasing impairment of sight. Amongst the Chinese Dr. Manson had noted many instances of debility, dyspepsia, rheumatism, paralysis of certain groups of muscles, and perhaps insanity, as consequences of dengue.

Mr. Williams's (Talgarth) paper shall receive attention.

Port.—No special directions as to the duties of port medical officers have been issued by the Medical Department of the Local Government Board, and, as we are advised, it is not proposed to issue any directions on the subject at present.

Inquirer.—The matter shall be noticed next week.

Mr. Henry Smith's (King's College) "Case of Fatal Retention of Urine produced by Fibroid Growth in a young Child" shall appear next week if possible.

A Father.—See advertisement columns of THE LANCET.

Mr. Smith, (Richmond.)—There is nothing in it.

FOREIGN DEGREES.

To the Editor of THE LANCET.

SIR,—Can any of your readers inform me whether there is a University in Brussels which confers the degree of M.D. with Honours? And, if so, whether such degree is ever withdrawn except in case of gross misconduct?

Your obedient servant,

December 8th, 1873. J. W. B.

COMMUNICATIONS, LETTERS, &c., have been received from—Sir H. Thompson, London; Dr. H. Tuke, London; Dr. J. B. Hicks, London; Mr. Hamilton, Hemel-Hempstead; Mr. Groves, London; Mr. Harding, Chesterfield; Mr. Richards, Hanwell; Mr. J. M'Taggart, London; Mr. Lynch, London; Mr. F. H. Smith, Lewisham; Mr. Ruffe, Bradford; Mr. Hovingdon, Whitechurch; Mr. Thomas, Plymouth; Mr. Builder, Croydon; Mr. R. Clarke, Shrewsbury; Mr. Poole, Halifax; Messrs. Scrivener, Gill, & Co., Ipswich; Mr. Godfrey, Reading; Mr. Cooper, Huddersfield; Mr. Gordon, Exeter; Mr. Mayfield, Oxford; Mr. Long, Manchester; Mr. Musgrove, Godalming; Dr. Drysdale, London; Mr. J. Parks, Stone; Mr. B. Atkins, Merthyr; Mr. E. Macrae, Colchester; Mr. Booth, Rochford; Mr. Richards, Boston; Mr. H. Moore, Malton; Mr. Neale, Brighton; Mr. W. B. Denfield, Bradford; Mr. Collins, Wrexham; Mr. Ford, Cork; Mr. Mayhew, Glastonbury; Mr. Hitchcock, London; Mr. Kendall, London; Mr. Pritchard, Tenham; Mr. Williams, Maidstone; Mr. Henry, Shrewsbury; Mr. Wood, London; Dr. Arthur, Brighton; Mr. Hewling, Chester; Mr. S. Forster, Douglas; Mr. R. Pringle, Northallerton; Mr. H. Reinward, London; Mr. J. Adney, Thrapstone; Mr. Thomas, Bristol; Mr. Hervey, Carnarvon; Mr. Cowell, Warwick; Mr. E. Johns, Chatteris; Mr. Grove, Cobham; Mr. E. Morgan, Ventnor; Mr. Groves, Faircroft; Mr. Andrew, Edinburgh; Mr. Wright, Wimborne; Mr. Burgoyne, London; Mr. Smith, Richmond; Mr. J. Moir, Kegnasham; Dr. Wilson, Doncaster; Mrs. Whitaker, Kirkby Lonsdale; Mr. Waddell, Tombland; Mr. Colmore, Uppingham; Mr. Rice, London; Dr. Whitmarsh, Hounslow; Mr. Cheese, Coleford; Mr. Ranaford, Bristol; Mr. Craven, Birkenhead; Mr. R. Hewson, Sunderland; Mr. Smith, Liverpool; Mr. Bond, Rochester; Mr. L. Gronow, Kenilworth; Mr. T. Howell, Nottingham; Mr. Carter, Southend; Mr. Davies, Carlisle; Mr. J. Allen, London; Mr. Hime, Sheffield; Dr. Pettigrew, Edinburgh; Mr. Henley, Poole; Mr. Geary, Hayle; Mr. Gamgee, Birmingham; Mr. Field, London; Mr. Nimmo, Edinburgh; Dr. Schleicner, Copenhagen; Mr. Grant, Woodford; Mr. Cullingworth, Manchester; Mr. Peck, London; Mr. J. Lennox, Edinburgh; Mr. Holthouse, London; Mr. Calthrop, Worcester; Mr. Riley, Peckham; Mr. Gale, Manchester; Mr. Childs, Plymouth; Mr. Fleming, Bowden; Mr. E. Henry, Lancaster; Mr. Elliott, Aberdare; Mr. Wardrop, London; Mr. Harrison, Sheffield; Dr. Menzies, Naples; Dr. Hickinbotham, Birmingham; Mr. Hawkes, Alton; Dr. Deane, St. Ives; Mr. E. Holmes, Weymouth; Mr. Deane, Dublin; Mr. Thomas, Bala; Mr. Penton, Stone; Mr. T. E. Williams, Talgarth; Dr. Lloyd, Malabar; Mr. J. E. Thompson, London; Dr. Jeffries, Boston, Mass.; Mr. Turner, London; Mr. Ward, Reade; Mr. Eardley, Burnley; Mr. Kesteven, Chester; Mr. Moore, Petersfield; Mr. Baker, New Romney; M. E. Decroix, Paris; Alpha; J. W. R.; A Health Officer; Medicus; A Provincial Surgeon; Enquirer; Abjectus; The Editor of the *Derbyshire Times*; E.; A Father; E. L.; Liverpudlian; Black Eye; &c. &c.

Leicester Advertiser, Cheltenham Telegraph, Practitioner, Torquay Times, Bradford Observer, Warrington Guardian, Hampshire Advertiser, Leeds Express, Clonmel Chronicle, Keighley News, Indian Medical Gazette, Whitehaven News, Carlisle Express, Allahabad Pioneer, Ironbridge Weekly Journal, and *Food, Water, and Air* have been received.

METEOROLOGICAL READINGS

(Taken by *Steward's Instruments*).

THE LANCET OFFICE, DEC. 11TH, 1873.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Wet Bulb.	Dry Bulb	Solar Radiation in Vacuo	Max. Temp. Shade	Min. Temp.	Rain-fall.	Remarks at 9 A.M.
Dec. 5	30·47	S.W.	42	44	...	47	40	...	Overcast
„ 6	30·50	N.N.E.	43	46	...	48	42	...	Overcast
„ 8	30·43	W.S.W.	42	44	...	50	41	...	Overcast
„ 9	30·62	N.E.	33	34	...	40	30	...	Foggy
„ 10	30·57	N.E.	...	29	...	33	26	...	Foggy
„ 11	30·04	W.S.W.	...	29	...	...	22	...	Foggy

Medical Diary of the Week.

Monday, Dec. 15.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
GUY'S HOSPITAL.—Operations on the Eye, 1½ P.M.
ST. MARK'S HOSPITAL.—Operations, 9 A.M. and 2 P.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
MEDICAL SOCIETY OF LONDON.—8 P.M. Dr. Farquharson, "On Cases of Infectious Tonsillitis." — Dr. Pearson; "An Epidemic of Sore-throat, with marked Constitutional Symptoms" (communicated by Dr. Farquharson). — Dr. Dowse, "On Cerebro-Spinal Meningitis, with Clinical Records."

Tuesday, Dec. 16.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
GUY'S HOSPITAL.—Operations, 1½ P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2 P.M.
PATHOLOGICAL SOCIETY OF LONDON.—8 P.M. The following Specimens will be exhibited:—Leucocythæmia with Lymphadenoma; Imperforate Anus; Ossifying Enchondroma; Renal Calculi; Cast of an Enchondroma; Pendulous Tumour from the Pubes of a Man; Deformity of the Knee-joint; Pericarditis and Myocarditis from a Case of Blood-poisoning following Whitlow; Spleen and Lymphatic Glands from a Case of Addison's Disease; &c. &c.

Wednesday, Dec. 17.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 3 P.M.
LONDON HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.
CANCER HOSPITAL.—Operations, 3 P.M.

Thursday, Dec. 18.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 3 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

Friday, Dec. 19.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
GUY'S HOSPITAL.—Operations, 1½ P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
MEDICAL MICROSCOPICAL SOCIETY.—8 P.M.

Saturday, Dec. 20.

HOSPITAL FOR WOMEN, Soho-square.—Operations, 9½ A.M.
ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 1½ P.M.
ROYAL FREE HOSPITAL.—Operations, 9 A.M. and 2 P.M.
CHARING-CROSS HOSPITAL.—Operations, 3 P.M.

TERMS FOR ADVERTISING IN THE LANCET.

For 7 lines and under	£0	4	0	For half a page	£2 12 0
For every additional line	0	0	6	For a page	5 0 0

The average number of words in each line is eleven.

Advertisements (to ensure insertion the same week) should be delivered at the Office not later than Wednesday; those from the country must be accompanied by a remittance.

Agent for the Advertising Department in France—
Mons. DE LOMINIE, 168, Rue Grenelle St. Germain Paris.